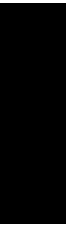
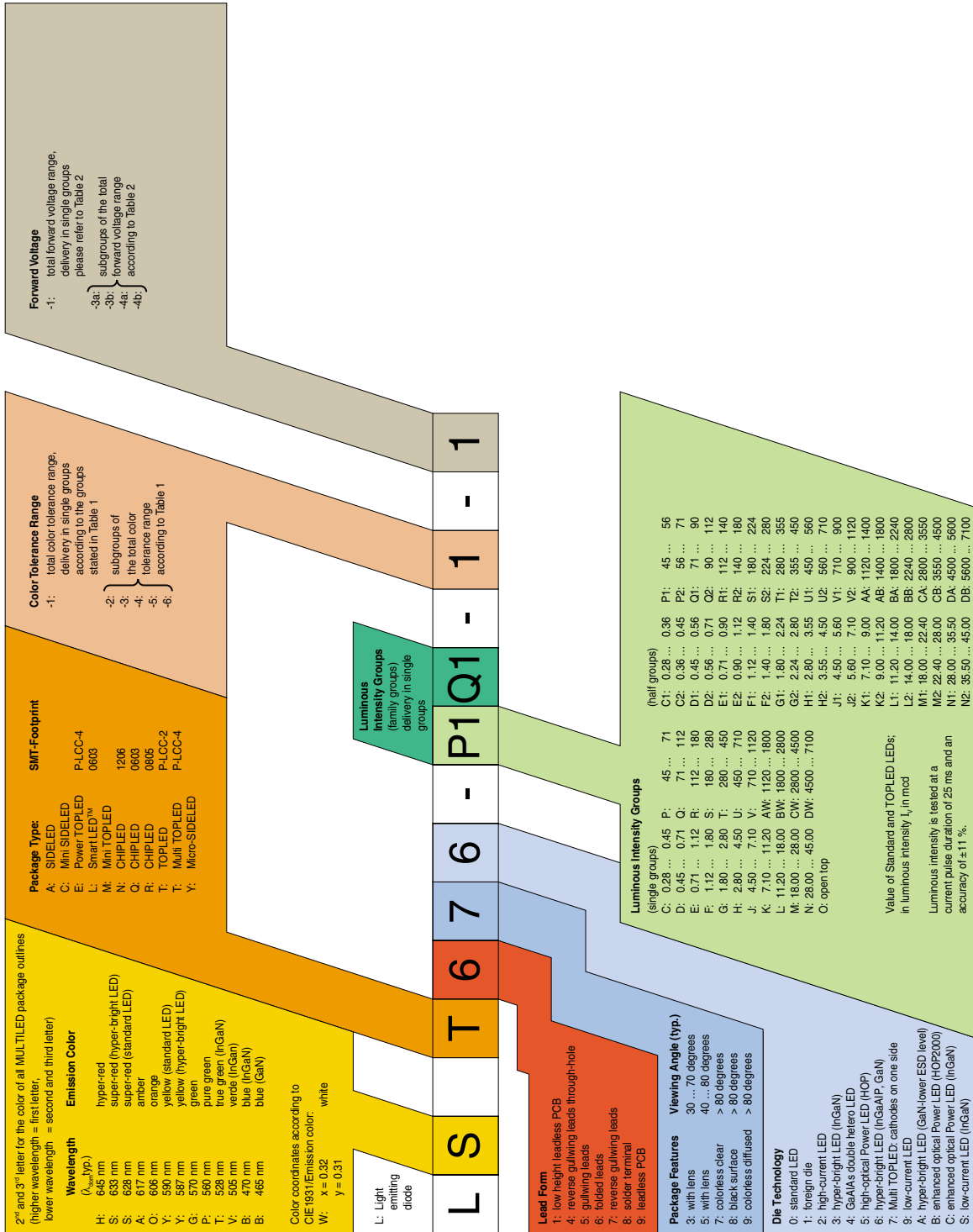

LUMINESZENZDIODEN

LIGHT EMITTING DIODES



SMT-LED-Typenbezeichnungsschema

SMT LED type designation system



Gurtung von Lumineszenzdiode

Alle SMT-LED werden im 8- bzw. 12-mm Gurt geliefert.

Taping of LEDs

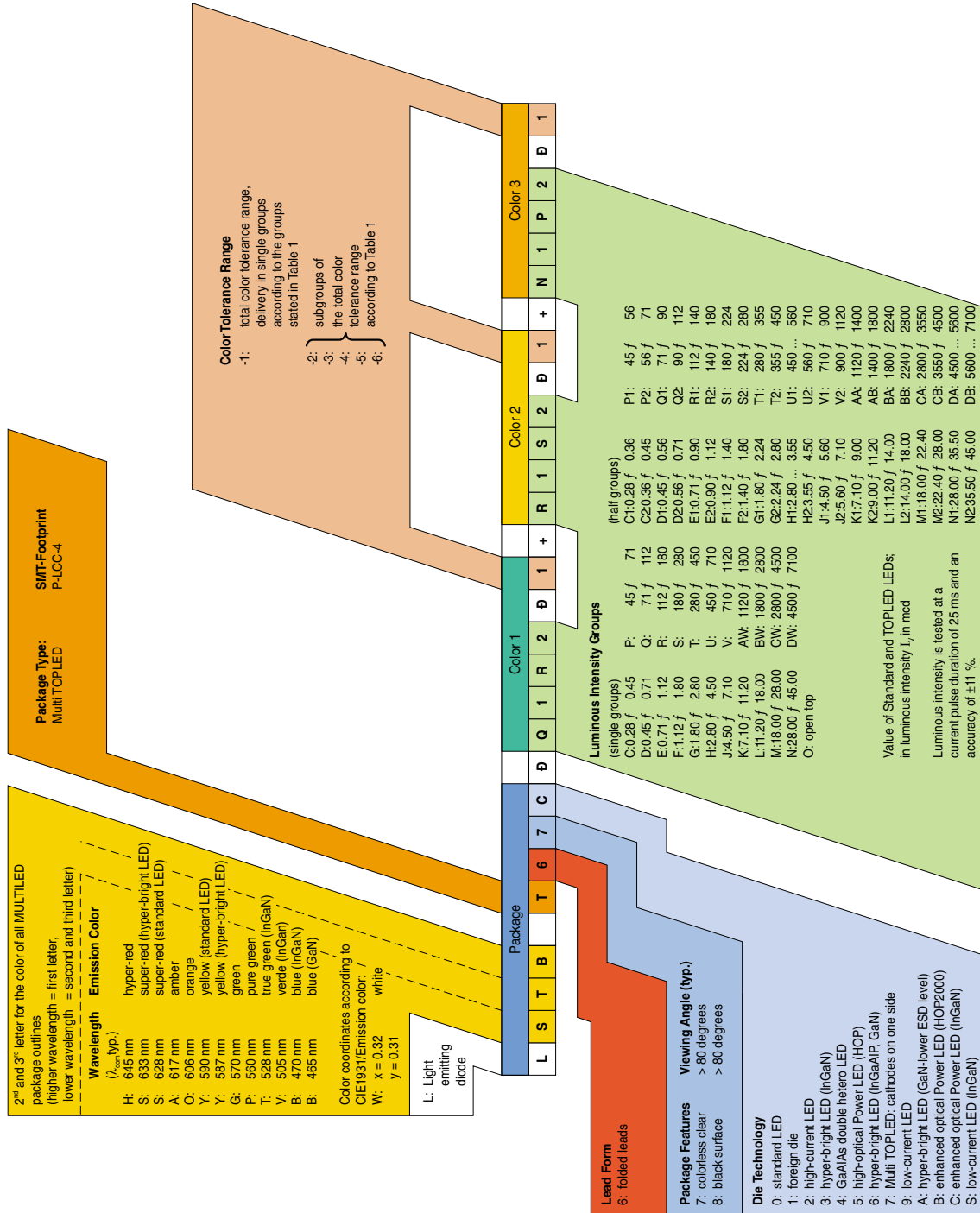
All SMT LEDs are available in 8 mm resp. 12 mm tapes.

LUMINESZENZDIODEN

LIGHT EMITTING DIODES

SMT-LED-Typenbezeichnungsschema
für 3-farb LEDs

SMT LED type designation system
for 3 color LEDs



Gurtung von Lumineszenzdiolen

Alle SMT-LED werden im 8- bzw. 12-mm Gurt geliefert.

Taping of LEDs

All SMT LEDs are available in 8 mm resp. 12 mm tapes.

GRUPPIERUNGSSCHEMA FÜR SMT LEDs

GROUPING SCHEME FOR SMT LEDs

Tabelle 1: Wellenlängengruppen für InGaN LEDs

Wellenlängengruppen für LB xxx3 und LB xxxC
(ohne Power TOPLED)
Wellenlängengruppen für LV xxx3 und LV xxxC
(ohne Power TOPLED)
Wellenlängengruppen für LT xxx3 und LT xxxC
(ohne Power TOPLED)

Table 1: Color Tolerance Range Grouping for InGaN LEDs

Wavelength Grouping for LB xxx3 and LB xxxC
(Power TOPLED not included)
Wavelength Grouping for LV xxx3 and LV xxxC
(Power TOPLED not included)
Wavelength Grouping for LT xxx3 and LT xxxC
(Power TOPLED not included)

Color Color Grouping	Blue at 20 mA		Verde green at 20 mA		True green at 20 mA		Unit
	min.	max.	min.	max.	min.	max.	
2							nm
3	464	468	499	503	519	525	nm
4	468	472	503	507	525	531	nm
5	472	476	507	511	531	537	nm
6							nm

Wellenlängen werden mit einer Stromeinprägedauer von 25 ms und einer Genauigkeit von ± 1 nm ermittelt.

Wavelengths are tested at a current pulse duration of 25 ms and an accuracy of ± 1 nm.

Wellenlängengruppen für LB Exx3 und LB ExxC (Power TOPLED)
Wellenlängengruppen für LV Exx3 und LV ExxC (Power TOPLED)
Wellenlängengruppen für LT Exx3 und LT ExxC (Power TOPLED)

Wavelength Grouping for LB Exx3 and LB ExxC (Power TOPLED)
Wavelength Grouping for LV Exx3 and LV ExxC (Power TOPLED)
Wavelength Grouping for LT Exx3 and LT ExxC (Power TOPLED)

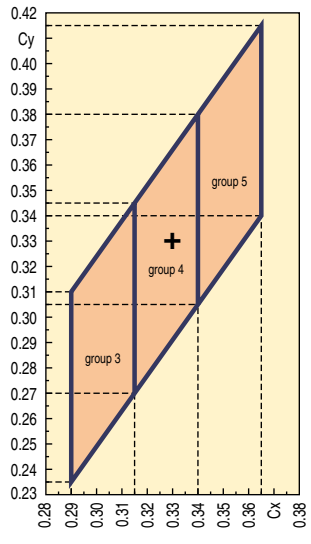
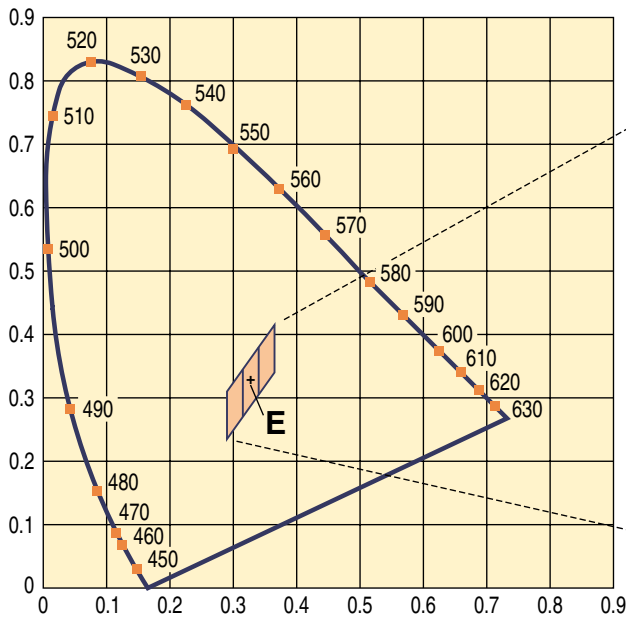
Color Color Grouping	Blue at 30 mA (Power TOPLED)		Verde green at 30 mA (Power TOPLED)		True green at 30 mA (Power TOPLED)		Unit
	min.	max.	min.	max.	min.	max.	
2							nm
3	463	467	497	501	516	522	nm
4	467	471	501	505	522	528	nm
5	471	475	505	509	528	534	nm
6							nm

Wellenlängen werden mit einer Stromeinprägedauer von 25 ms und einer Genauigkeit von ± 1 nm ermittelt.

Wavelengths are tested at a current pulse duration of 25 ms and an accuracy of ± 1 nm.

Farbortgruppe

Chromaticity coordinate groups



Farbortgruppen werden mit einer Stromeinprägedauer von 25 ms und einer Genauigkeit von $\pm 0,1$ nm ermittelt.

Chromaticity coordinate groups are tested at a current pulse duration of 25 ms and an accuracy of $\pm 0,1$ nm.

GRUPPIERUNGSSCHEMA FÜR SMT LEDs

GROUPING SCHEME FOR SMT LEDs

Wellenlängengruppen für Standard LEDs und InGaP LEDs

Wellenlängengruppen für LY xxx0 und LY xxx6
 Wellenlängengruppen für LO xxx0 und LO xxx6
 Wellenlängengruppen für LA xxx0 und LA xxx6
 Wellenlängengruppen für LS xxx0 und LS xxx6
 Wellenlängengruppen für LG xxx0
 Wellenlängengruppen für LP xxx0

Color Tolerance Range Grouping for standard LEDs and InGaP LEDs

Wavelength Grouping for LY xxx0 and LY xxx6
 Wavelength Grouping for LO xxx0 and LO xxx6
 Wavelength Grouping for LA xxx0 and LA xxx6
 Wavelength Grouping for LS xxx0 and LS xxx6
 Wavelength Grouping for LG xxx0
 Wavelength Grouping for LP xxx0

Color / Color Grouping	Yellow		Orange		Amber		Super red		green		Pure green		Unit
	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	min.	max.	
1							622	634	664	676	656	666	nm
2	580	583	600	603	612	616							nm
3	583	586	603	606	616	620							nm
4	586	589	606	609	620	624							nm
5	589	592											nm
6	592	595											nm

Wellenlängen werden mit einer Stromeinprägedauer von 25 ms und einer Genauigkeit von ± 1 nm ermittelt.

Wavelengths are tested at a current pulse duration of 25 ms and an accuracy of ± 1 nm.

Wellenlängengruppen für High Optical Power LEDs

Wellenlängengruppen für LY xxx5 und LY xxxB
 Wellenlängengruppen für LO xxxB
 Wellenlängengruppen für LA xxx5 und LA xxxB
 Wellenlängengruppen für LS xxx5 und LS xxxB

Color Tolerance Range Grouping for High Optical Power LEDs

Wavelength Grouping for LY xxx5 and LY xxxB
 Wavelength Grouping for LO xxxB
 Wavelength Grouping for LA xxx5 and LA xxxB
 Wavelength Grouping for LS xxx5 and LS xxxB

Color / Color Grouping	Yellow (HOP / HOP 2000)		Orange (HOP 2000)		Amber (HOP / HOP 2000)		Super red (HOP / HOP 2000)		Unit
	min.	max.	min.	max.	min.	max.	min.	max.	
1							622	634	nm
2	580	583	600	603	612	616			nm
3	583	586	603	606	616	620			nm
4	586	589	606	609	620	624			nm
5	589	592							nm
6	592	595							nm

Wellenlängen werden mit einer Stromeinprägedauer von 25 ms und einer Genauigkeit von ± 1 nm ermittelt.

Wavelengths are tested at a current pulse duration of 25 ms and an accuracy of ± 1 nm.

GRUPPIERUNGSSCHEMA FÜR SMT LEDs

GROUPING SCHEME FOR SMT LEDs

Tabelle 2: Durchlassspannungsgruppen für High Optical Power LEDs

Durchlassspannungsgruppen für LY xxx5 and LY xxxB
Durchlassspannungsgruppen für LO xxxB

Table 2: Forward Voltage Grouping for High Optical Power LEDs

Forward Voltage Grouping for LY xxx5 and LY xxxB
Forward Voltage Grouping for LO xxxB

Color V_F Grouping	Power TOPLED Yellow at 50 mA (HOP / HOP 2000)		Unit
	min.	max.	
3	1.9	2.2	V
4	2.2	2.5	V

Spannungswerte werden mit einer Stromeinprägedauer von 25 ms und einer Genauigkeit von $\pm 0,1$ V ermittelt.

Voltages are tested at a current pulse duration of 25 ms and an accuracy of ± 0.1 V.

Durchlassspannungsgruppen für LA xxx5 and LA xxxB

Forward Voltage Grouping for LA xxx5 and LA xxxB

Color V_F Grouping	Amber (HOP / HOP 2000)		Unit
	min.	max.	
3A	1.90	2.05	V
3B	2.05	2.20	V
4A	2.20	2.35	V
4B	2.35	2.50	V

Spannungswerte werden mit einer Stromeinprägedauer von 25 ms und einer Genauigkeit von $\pm 0,1$ V ermittelt.

Voltages are tested at a current pulse duration of 25 ms and an accuracy of ± 0.1 V.

LUMINESZENZDIODEN

LIGHT EMITTING DIODES

HINWEISE

Gurtung

TOPLED, Multi TOPLED:	8 mm Gurt, gegurtet auf 18 cm Spule, 2000 Stück/Spule, mit Eintrag E7510 auf 33 cm Spule 8000 Stück/Spule
Power TOPLED:	8 mm Gurt, gegurtet auf 18 cm Spule, 2000 Stück/Spule, mit Eintrag E7510 auf 33 cm Spule 8000 Stück/Spule.
Power TOPLED mit Linse:	12 mm Gurt, gegurtet auf 33 cm Spule, 2000 Stück/Spule.
TOPLED RG:	12 mm Gurt, gegurtet auf 18 cm Spule, 2000 Stück/Spule, Mit Eintrag E7510 auf 33 cm Spule, 8000 Stück/Spule.
SIDELED, Multi SIDELED:	12 mm Gurt, gegurtet auf 33 cm Spule, 2000 Stück/Spule.
Mini TOPLED:	8 mm Gurt, gegurtet auf 18 cm Spule, 3000 Stück /Spule, mit Eintrag E7510 auf 33 cm Spule, 12000 Stück/Spule.
Mini TOPLED RG through-hole:	12 mm Gurt, gegurtet auf 18 cm Spule, 3000 Stück/Spule, mit Eintrag E7510 auf 33 cm Spule, 11 800 Stück/Spule
Mini TOPLED RG:	12 mm Gurt, gegurtet auf 18 cm Spule, 3000 Stück/Spule, mit Eintrag E7510 auf 33 cm Spule, 11 800 Stück/Spule
Mini SIDELED:	12 mm Gurt, gegurtet auf 18 cm Spule, 2500 Stück/Spule, mit Eintrag E7510 auf 33 cm Spule, 10000 Stück/Spule.
Micro SIDELED:	12 mm Gurt, gegurtet auf 18 cm Spule, 3000 Stück/Spule mit Eintrag E 7510 auf 33 cm Spule, 10000 Stück/Spule.
CHIPLED 1206:	8 mm Gurt, gegurtet auf 18 cm Spule, 3000 Stück/Spule
CHIPLED 0805:	8 mm Gurt, gegurtet auf 18 cm Spule, 4000 Stück/Spule
CHIPLED 0603:	8 mm Gurt, gegurtet auf 18 cm Spule, 4000 Stück/Spule
SmartLED™:	8 mm Gurt, gegurtet auf 18 cm Spule, 10 000 Stück/Spule, mit Eintrag E7510 auf 33 cm Spule, 40000 Stück/Spule.

NOTES

Tape and Reel

TOPLED, Multi TOPLED:	8-mm tape, taped on 18-cm reel, 2000 pieces/reel, with supplement E7510 on 33-cm reel, 8000 pieces/reel.
Power TOPLED:	8-mm tape, taped on 18-cm reel, 2000 pieces/reel, with supplement E7510 on 33-cm reel, 8000 pieces/reel.
Power TOPLED with Lens:	12-mm tape, taped on 33-cm reel, 2000 pieces/reel.
TOPLED RG:	12-mm tape, taped on 18-cm reel, 2000 pieces/reel, with supplement E7510 on 33-cm reel, 8000 pieces/reel.
SIDELED, Multi SIDELED:	12-mm tape, taped on 33 cm reel, 2000 pieces/reel.
Mini TOPLED:	8-mm tape, taped on 18-cm reel, 3000 pieces/reel, with supplement E7510 on 33-cm reel, 12000 pieces/reel.
Mini TOPLED RG through-hole:	12-mm tape, taped on 18-cm reel, 3000 pieces/reel, with supplement E7510 on 33-cm reel, 11 800 pieces/reel
Mini TOPLED RG:	12-mm tape, taped on 18-cm reel, 3000 pieces/reel, with supplement E7510 on 33-cm reel, 11 800 pieces/reel
Mini SIDELED:	12-mm tape, taped on 18-cm reel, 2500 pieces/reel, with Supplement E7510 on 33-cm Spule, 10000 pieces/reel.
Micro SIDELED:	12 mm tape, taped on 18-cm reel, 3000 pieces/reel, with supplement E7510 on 33-cm reel, 10000 pieces/reel.
CHIPLED 1206:	8 mm tape, taped on 18-cm reel, 3000 pieces/reel
CHIPLED 0805:	8 mm tape, taped on 18-cm reel, 4000 pieces/reel
CHIPLED 0603:	8 mm tape, taped on 18-cm reel, 4000 pieces/reel
SmartLED™:	8 mm tape, taped on 18-cm reel, 10 000 pieces/reel, with supplement E7510 on 33-cm reel, 40000 pieces/reel.

Parameter des OSRAM LED Helligkeitsgruppen System für SMT LEDs

SMT LEDs werden in Zukunft ausschließlich in Halbgruppen gemessen. Die Helligkeitsstreuung in einer Gruppe beträgt somit maximal nur noch $(I_{v \max} / I_{v \min}) \leq 1,6$. Eine Verpackungseinheit beinhaltet jeweils eine Halbgruppe.

(Helligkeitsstreuung : halbe Helligkeit: $\pm 23\%$)

Helligkeitsgruppen und Werte siehe Seite 58 Typenbezeichnungsschema.

1. In einer Verpackungseinheit / Gurt ist immer nur eine Halbgruppe!
2. Die Standardlieferform von Serientypen beinhaltet eine untere bzw. eine obere Familiengruppe, die aus nur 3 bzw. 4 Halbgruppen besteht. Einzelgruppen sind nicht erhältlich
3. Eine Familiengruppe deckt etwa 60% der Gesamthelligkeits-Verteilung ab.

Beispiel für Gruppierungsschema:

LS T676-P1Q1-1: untere Familiengruppe
LS T676-Q1R2-1: obere Familiengruppe

Untere Familiengruppe: Der mögliche Lieferumfang beinhaltet die Helligkeitsgruppen P1, P2, Q1

Obere Familiengruppe: Der mögliche Lieferumfang beinhaltet die Helligkeitsgruppen Q1, Q2, R1, R2

Die Gruppe Q1 liegt in der Hauptverteilung und ist somit bei beiden Familiengruppen enthalten

Lambda Code "-1" ist die Farbtoleranz (Dominante Wellenlänge). Auf Anfrage sind bei einigen Typen mit Aufpreis Farbselektionen (Wellenlängengruppen) möglich.

Goldene Bestellregel für Einzelgruppen zur Sicherstellung einer kontinuierlichen LED-Belieferung:

In jeder LED-Bestellung muß neben der bestellten "Einzelgruppe" die freigegebene "Reservegruppe" deutlich aufgeführt werden.

Helligkeitsgruppierung bei SMT MULTILED

Bei einigen Multi TOPLED / Multi SIDELED haben wir auf Grund von diversen Kundenwünschen ein neues Gruppierungsschema eingeführt.

Was ist neu?

Beide (oder mehrere) Farben werden nach dem Helligkeitsgruppierungsschema (siehe Typenbezeichnungsschema) in Lichtstärke (mcd) gruppiert.

Beispiel: LSY T676 - P + Q

Superrot (S) Gruppe P = 45 ... 71 mcd

Gelb (Y) Gruppe Q = 71 ... 112 mcd

Helligkeitsgruppen

Durch die Helligkeitsverteilung von den Einzelfarben ergeben sich 4 bis 6 Einzelgruppen bei Multi TOPLED / Multi SIDELED:

Beispiel: LSY T676	Bestellgruppe
- P + P	} mögliche Liefergruppen
- P + Q	
- P + R	
- Q + Q	
- Q + R	

In einer Verpackungseinheit ist immer nur eine Kombination enthalten.

Max. Streubreite der Helligkeit innerhalb einer Verpackungseinheit

$I_{v \min} : I_{v \max}$ bzw. $\Phi_{v \min} : \Phi_{v \max} = 1 : 1.6$

Parameters for OSRAM LED Luminous Intensity Group System for SMT LEDs

In future, **SMT LEDs** will only be measured in half groups. Therefore the maximum luminous intensity variation in one group never exceeds $(I_{v \max} / I_{v \min}) \leq 1,6$. Each packing unit contains one half group.

(luminous intensity variation : half luminous intensity: $\pm 23\%$)

For luminous intensity groups and values see page 58 Type designation system.

1. No packing unit/tape ever contains more than one luminous intensity group!
2. The standard shipping format for serial types includes a lower or upper family group which contains of 3 or 4 groups. Individual groups are not available.
3. A family group covers approx. 60% of the overall luminous intensity.

Example of grouping scheme:

LS T676-P1Q1-1: lower family group
LS T676-Q1R2-1: upper family group

Lower family group: Scope of delivery includes luminous intensity groups P1, P2, Q1

Upper family group: Scope of delivery includes luminous intensity groups Q1, Q2, R1, R2

Group Q1 is situated in the main distribution and is therefore part of both family groups.

The color tolerance (dominant wave length) is the lambda code "-1". On surcharge wave length selections are available for most types.

Golden rule for ordering individual groups to ensure a continuous LED supply:

For any LED order please indicate clearly the released "reserve group" in addition to the "individual group" ordered.

Luminous Intensity Groups for SMT MULTILED

For certain Multi TOPLED / Multi SIDELED we have introduced a new grouping system in response to customer demands.

What is new?

Two (or more) colors will be grouped according to luminous intensity (mcd) in line with the luminous intensity group system (see Type designation system).

Example: LSY T676 - P + Q

super-red (S) Group P = 45 ... 71 mcd

yellow (Y) Group Q = 71 ... 112 mcd

Luminous Intensity Groups

The luminosity distribution of the individual colors results in the following 4 to 6 individual groups for Multi TOPLED / Multi SIDELED:

Example: LSY T676	Order group
- P + P	} possible shipment groups
- P + Q	
- P + R	
- Q + Q	
- Q + R	

Only one combination is included in any packing unit.

Matching Factor of Brightness within one packaging Unit

$I_{v \min} : I_{v \max}$ bzw. $\Phi_{v \min} : \Phi_{v \max} = 1 : 1.6$

Sicherheitshinweise

Osram LEDs erreichen aufgrund von neuen Chip-Technologien immer höhere optische Leistungen.

Wir empfehlen daher, schon bei der Entwicklung von Geräten, die zu diesem Zeitpunkt gültigen Normen IEC 825-1 bzw. EN 60825-1 zu beachten und insbesondere auf den Gebrauch von entsprechenden Schutzvorrichtungen in Ihren Labors hinzuweisen.

Alle Osram LED der Emissionsfarben Hyper-Rot, Super-Rot, Orange, Gelb, Grün und Pure Green entsprechen der DIN 40839 und sind somit störimpulsfest (Load Dump). Ausnahmen sind LC LED (Niedrigstrom) und Hyper-bright LED.

Betriebsbereich

Der empfohlene Betriebsbereich gibt die Betriebsbedingungen an, die nicht überschritten werden sollten, um eine Lebensdauer von $> 10^5$ Stunden zu erreichen.

Safety Instructions

The use of new chip technologies means that Osram LEDs are delivering higher and higher levels of optical performance.

We therefore recommend that the current versions of the IEC 825-1 and EN 60825-1 standards are taken into account right from the outset, i.e. at the equipment development stage, and that suitable protection facilities are provided in your laboratories.

All Osram LEDs of the emission colors hyper-red, super-red, orange, yellow, green and pure green are in accordance with DIN 40839 and therefore resistant to inference pulses (Load Dump) with the exception of LC LEDs (Low Current) and Hyper-bright LEDs.

Operating Range

In order to achieve a medium life of $> 10^5$ hours, the conditions indicated by the recommended operating range should not be exceeded.

LUMINESZENZDIODEN

LIGHT EMITTING DIODES

SMT-LED

SMT-LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Farbe der Licht- austrittsfläche Color of light emitting area	at			2 ϕ (typ.) (50% I _V) [deg].	Bestellnummer Ordering code	Fig.
					I _V [mcd]	Φ_V [mlm]	I _F [mA]			


TOPLED

TOPLED

	LH T674-L2M2-1 LH T674-M2P1-1	hyper-red	645	colorless clear	14.00 ... 28.00 22.40 ... 56.00	62.0 (typ.) 110.0 (typ.)	10	120	Q62703-Q5024 Q62703-Q5025	1
	LS T670-H2J2-1 LS T670-J2L1-1	super-red	628	colorless clear	3.55 ... 7.10 5.60 ... 14.00	15.0 (typ.) 28.0 (typ.)	10	120	Q62703-Q5094 Q62703-Q5095	
	LO T670-J1K1-24 LO T670-K1L2-24	orange	606	colorless clear	4.50 ... 9.00 7.10 ... 18.00	20.0 (typ.) 36.0 (typ.)	10	120	Q62703-Q5046 Q62703-Q5047	
	LY T670-J1K1-26 LY T670-K1L2-26	yellow	587	colorless clear	4.50 ... 9.00 7.10 ... 18.00	20.0 (typ.) 36.0 (typ.)	10	120	Q62703-Q5132 Q62703-Q5133	
	LG T670-K1L1-1 LG T670-L1M2-1	green	570	colorless clear	7.10 ... 14.00 11.20 ... 28.00	31.0 (typ.) 56.0 (typ.)	10	120	Q62703-Q5010 Q62703-Q5011	
	LP T670-G1H1-1 LP T670-H1J2-1	pure green	560	colorless clear	1.80 ... 3.55 2.80 ... 7.10	7.1 (typ.) 14.0 (typ.)	10	120	Q62703-Q5064 Q62703-Q5065	
	LG T671-K2L2-1 LG T671-L2N1-1	green	570	colorless clear	9.00 ... 18.00 14.00 ... 35.50	40.0 (typ.) 70.0 (typ.)	10	120	Q62703-Q5012 Q62703-Q5013	

Super TOPLED


Super TOPLED

	LG T672-P1Q1-1 LG T672-Q1R2-1	green	570	colorless clear	45.0 ... 90.0 71.0 ... 180.0	190 (typ.) 350 (typ.)	50	120	Q62703-Q5014 Q62703-Q5015	1
	LP T672-L2M2-1 LP T672-M2P1-1	pure green	560	colorless clear	14.0 ... 28.0 22.4 ... 56.0	62 (typ.) 110 (typ.)	50	120	Q62703-Q5066 Q62703-Q5067	

■ Nicht für Neuentwicklungen / Not for new design

TOPLED RG (Reverse Gullwing)

TOPLED RG (Reverse Gullwing)

	LH T774-L2M2-1 LH T774-M2P1-1	hyper-red	645	colorless clear	14.00 ... 28.00 22.40 ... 56.00	62.0 (typ.) 110.0 (typ.)	10	120	Q62703-Q5028 Q62703-Q5029	2
	LS T770-H2J2-1 LS T770-J2L1-1	super-red	628	colorless clear	3.55 ... 7.10 5.60 ... 14.00	15.0 (typ.) 28.0 (typ.)	10	120	Q62703-Q5101 Q62703-Q5102	
	LO T770-J1K1-24 LO T770-K1L2-24	orange	606	colorless clear	4.50 ... 9.00 7.10 ... 18.00	20.0 (typ.) 36.0 (typ.)	10	120	Q62703-Q5050 Q62703-Q5051	
	LY T770-J1K1-26 LY T770-K1L2-26	yellow	587	colorless clear	4.50 ... 9.00 7.10 ... 18.00	20.0 (typ.) 36.0 (typ.)	10	120	Q62703-Q5139 Q62703-Q5140	
	LG T770-K1L1-1 LG T770-L1M2-1	green	570	colorless clear	7.10 ... 14.00 11.20 ... 28.00	31.0 (typ.) 56.0 (typ.)	10	120	Q62703-Q5018 Q62703-Q5019	
	LP T770-G1H1-1 LP T770-H1J2-1	pure green	560	colorless clear	1.80 ... 3.55 2.80 ... 7.10	7.7 (typ.) 14.0 (typ.)	10	120	Q62703-Q5068 Q62703-Q5069	

LUMINESZENZDIODEN

LIGHT EMITTING DIODES








SMT-LED

SMT-LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Farbe der Licht- austrittsfläche Color of light emitting area	at I_F [mA]			2 ϕ (typ.) (50% I_V) [deg].	Bestellnummer Ordering code	Fig.
					I_V [mcd]	Φ_V [mlm]				

Hyper TOPLED

Hyper TOPLED

	LH T676-P1Q1-1 LH T676-Q1R2-1	hyper-red	645	colorless clear	45.0 ... 90.0 71.0 ... 180.0	190 (typ.) 350 (typ.)	20	120	Q62703-Q5026 Q62703-Q5027	1
	LS T676-P1Q1-1 LS T676-Q1R2-1	super-red	633	colorless clear	45.0 ... 90.0 71.0 ... 180.0	190 (typ.) 350 (typ.)	20	120	Q62703-Q5096 Q62703-Q5097	
	LA T676-Q1R1-1 LA T676-R1S2-1	amber	615	colorless clear	71.0 ... 140.0 112.0 ... 280.0	310 (typ.) 560 (typ.)	20	120	Q62703-Q4982 Q62703-Q4983	
	LO T676-Q2R2-24 LO T676-R2S2-24	orange	606	colorless clear	90.0 ... 180.0 140.0 ... 280.0	390 (typ.) 610 (typ.)	20	120	Q62703-Q4405 Q62703-Q5049	
	LY T676-Q1R1-26 LY T676-R1S2-26	yellow	587	colorless clear	71.0 ... 140.0 112.0 ... 280.0	310 (typ.) 560 (typ.)	20	120	Q62703-Q5134 Q62703-Q5135	
	LB T676-J2K2-1 LB T676-K2M1-1	blue	465	colorless clear	5.6 ... 11.2 9.0 ... 22.4	25 (typ.) 45 (typ.)	10	120	Q62703-Q4994 Q62703-Q4995	
	LS T675-R2T1-1	super-red	633	colorless clear	140.0 ... 355.0	740 (typ.)	30	120	Q62703-Q6349	1
	LY T675-S2U1-26	yellow	587	colorless clear	224.0 ... 560.0	1200 (typ.)	30	120	Q62703-Q6351	
	LB T673-M2N2-35 LB T673-N2Q1-35	blue	470	colorless clear	22.4 ... 45.0 35.5 ... 90.0	100 (typ.) 180 (typ.)	20	120	Q62703-Q4838 Q62703-Q4887	1
	LV T673-Q1R1-35 LV T673-R1S2-35	verde	505	colorless clear	71.0 ... 140.0 112.0 ... 280.0	310 (typ.) 560 (typ.)	20	120	Q62703-Q4845 Q62703-Q4891	
	LT T673-Q2R2-35 LT T673-R2T1-35	true green	528	colorless clear	90.0 ... 180.0 140.0 ... 355.0	390 (typ.) 700 (typ.)	20	120	Q62703-Q4851 Q62703-Q4895	1
	LB T67C-N2P2-35 LB T67C-P2R1-35	blue	470	colorless clear	35.5 ... 71.0 56.0 ... 140.0	160 (typ.) 290 (typ.)	20	120	Q62703-Q6223 Q62703-Q6224	
	LV T67C-R1S1-35 LV T67C-S1T2-35	verde	505	colorless clear	112.0 ... 224.0 180.0 ... 450.0	500 (typ.) 950 (typ.)	20	120	Q62703-Q6288 Q62703-Q6289	
	LW T676-M1N1-35 LW T676-N1P2-35	white	x=0.30 y=0.32	colored diffused	18.0 ... 35.5 28.0 ... 71.0	77 (typ.) 140 (typ.)	10	120	Q62703-Q5107 Q62703-Q5108	1
	LW T673-Q2R2-35 LW T673-R2S2-35	white	x=0.32 y=0.31	colored diffused	90.0 ... 180.0 140.0 ... 280.0	390 (typ.) 610 (typ.)	20	120	Q62703-Q4836 Q62703-Q4686	
	LW T67C-R2S2-35 LW T67C-S2U1-35	white	x=0.32 y=0.31	colored diffused	140.0 ... 280.0 224.0 ... 560.0	630 (typ.) 1200 (typ.)	20	120	Q62703-Q6217 Q62703-Q6218	
	LY T686-Q1R1-26 LY T686-R1S2-26	yellow	587	colorless clear	71.0 ... 140.0 112.0 ... 280.0	310 (typ.) 560 (typ.)	30	120	on request Q62703-Q4957	1
	LY T685-S1T1-26	yellow	587	colorless clear	180.0 ... 355.0	800 (typ.)	30	120	on request	
	LB T68C-N2P2-35 LB T68C-P2R1-35	blue	470	colorless clear	35.5 ... 71.0 56.0 ... 140.0	160 (typ.) 290 (typ.)	20	120	Q62703-Q6290 Q62703-Q6291	1
	LT T68C-R2S2-35 LT T68C-S2U1-35	true green	528	colorless clear	140.0 ... 280.0 224.0 ... 560.0	630 (typ.) 1100 (typ.)	20	120	Q62703-Q6294 Q62703-Q6293	

LUMINESZENZDIODEN

LIGHT EMITTING DIODES






SMT-LED

SMT-LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Farbe der Licht- austrittsfläche Color of light emitting area	at I_F			2 ϕ (typ.) (50% I_V) [deg].	Bestellnummer Ordering code	Fig.
					I_V [mcd]	Φ_V [mlm]	[mA]			




Power TOPLED

Power TOPLED

	LS E675-S1T1-1-1 LS E675-T1U2-1-1	super-red	633	colorless clear	180 ... 355 280 ... 710	770 (typ.) 1400 (typ.)	50	120	Q62703-Q6103 Q62703-Q6104	
	LA E675-T1U1-1-1 LA E675-U1V1-1-1	amber	617	colorless clear	355 ... 900	1900 (typ.)	50	120	Q62703-Q4976 Q62703-Q4977	
	LY E675-T1U1-26-1 LY E675-U1V2-26-1	yellow	587	colorless clear	280 ... 450 450 ... 1120	1260 (typ.) 2300 (typ.)	50	120	Q62703-Q6026 Q62703-Q6298	
	LA E67B-U2AA-24-1	amber	617	colorless clear	560 ... 1400	2900 (typ.)	50	120	Q62703-Q5965	
	LO E67B-U2AA-24	orange	606	colorless clear	560 ... 1400	2900 (typ.)	50	120	Q62703-Q6010	
	LB E673-N1P1-35 LB E673-P1Q2-35	blue	469	colorless clear	28 ... 56 45 ... 112	120 (typ.) 220 (typ.)	30	120	Q62703-Q4844 Q62703-Q4890	3
	LV E673-Q2R2-35 LV E673-R2T1-35	verde	503	colorless clear	90 ... 180 140 ... 355	390 (typ.) 700 (typ.)	30	120	Q62703-Q4848 Q62703-Q4894	
	LT E673-R1S1-35 LT E673-S1T2-35	true green	525	colorless clear	112 ... 224 180 ... 450	490 (typ.) 880 (typ.)	30	120	Q62703-Q4854 Q62703-Q4898	
	LB E67C-P2Q2-35 LB E67C-Q2S1-35	blue	469	colorless clear	56 ... 112 90 ... 224	250 (typ.) 470 (typ.)	30	120	Q62703-Q6235 Q62703-Q6236	
	LV E67C-S1T1-35 LV E67C-T1U2-35	verde	503	colorless clear	180 ... 355 280 ... 710	800 (typ.) 1480 (typ.)	30	120	Q62703-Q6286 Q62703-Q6287	
	LT E67C-S2T2-35 LT E67C-T2V1-35	true green	525	colorless clear	224 ... 450 355 ... 900	1000 (typ.) 1900 (typ.)	30	120	on request Q62703-Q6135	
	LW E673-R2S2-35 LW E673-S2U1-35	white	x=0.32 y=0.31	colored diffused	140 ... 280 224 ... 560	610 (typ.) 1100 (typ.)	30	120	Q62703-Q4862 Q62703-Q4902	
	LW E67C-T1U1-35 LW E67C-U1V2-35	white	x=0.32 y=0.31	colored diffused	280 ... 560 450 ... 1120	1250 (typ.) 2400 (typ.)	30	120	Q62703-Q6132 Q62703-Q6133	

Power TOPLED mit Linse

Power TOPLED with Lens

	LS E655-U2AA-1-1	super-red	633	colorless clear	560 ... 1400	1150 (typ.)	50	60	Q62703-Q5996	
	LA E655-V2AB-1-1 LA E655-ABCA-1-1	amber	617	colorless clear	900 ... 1800 1400 ... 3550	1600 (typ.) 2900 (typ.)	50	60	Q62703-Q5837 Q62703-Q5838	
	LY E655-V2AB-26-1 LY E655-ABCA-26-1	yellow	587	colorless clear	900 ... 1800 1400 ... 3550	1600 (typ.) 2900 (typ.)	50	60	Q62703-Q5912 Q62703-Q5913	
	LA E65B-ABCA-24-1	amber	617	colorless clear	1400 ... 3550	2900 (typ.)	50	60	Q62703-Q5982	4
	LB E63C-R2S2-35	blue	469	colorless clear	140 ... 280	250 (typ.)	30	30	Q62703-Q6295	
	LT E63C-U2V2-35-1 LT E63C-V2BA-35-1	true green	525	colorless clear	560 ... 1120 900 ... 2240	1000 (typ.) 1900 (typ.)	30	30	on request on request	

LUMINESZENZDIODEN

LIGHT EMITTING DIODES



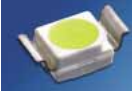
SMT-LED

SMT-LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Farbe der Licht- austrittsfläche Color of light emitting area	at I_F			2ϕ (typ.) (50% I_V) [deg].	Bestellnummer Ordering code	Fig.
					I_V [mcd]	Φ_V [mlm]				

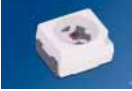
Hyper TOPLED RG (Reverse Gullwing)

Hyper TOPLED RG (Reverse Gullwing)

	LS T776-P1Q1-1 LS T776-Q1R2-1	super-red	633	colorless clear	45.0 ... 90.0 71.0 ... 180.0	190 (typ.) 350 (typ.)	20	120	Q62703-Q5103 Q62703-Q5104	2
	LA T776-Q1R1-1 LA T776-R1S2-1	amber	615	colorless clear	71.0 ... 140.0 112.0 ... 280.0	310 (typ.) 560 (typ.)	20	120	Q62703-Q4984 Q62703-Q4985	
	LO T776-Q2R2-24 LO T776-R2T1-24	orange	606	colorless clear	90.0 ... 180.0 140.0 ... 355.0	390 (typ.) 690 (typ.)	20	120	Q62703-Q5052 Q62703-Q5053	
	LY T776-Q1R1-26 LY T776-R1S2-26	yellow	587	colorless clear	71.0 ... 140.0 112.0 ... 280.0	310 (typ.) 560 (typ.)	20	120	Q62703-Q5141 Q62703-Q5142	
	LB T776-J2K2-1 LB T776-K2M1-1	blue	465	colorless clear	5.6 ... 11.2 9.0 ... 22.4	25 (typ.) 45 (typ.)	10	120	Q62703-Q4996 Q62703-Q4997	
	LB T773-M2N2-35 LB T773-N2Q1-35	blue	470	colorless clear	22.4 ... 45.0 35.5 ... 90.0	100 (typ.) 180 (typ.)	20	120	Q62703-Q5761 Q62703-Q5760	
	LV T773-Q1R1-35 LV T773-R1S2-35	verde	505	colorless clear	71.0 ... 140.0 112.0 ... 280.0	310 (typ.) 560 (typ.)	20	120	Q62703-Q4914 Q62703-Q4915	
	LT T773-Q1R2-35 LT T773-R2T1-35	true green	528	colorless clear	90.0 ... 180.0 140.0 ... 355.0	390 (typ.) 700 (typ.)	20	120	Q62703-Q4858 Q62703-Q4899	
	LW T773-Q2R2-35 LW T773-R2S2-35	white	x=0.32 y=0.31	colored diffused	90.0 ... 180.0 140.0 ... 280.0	390 (typ.) 610 (typ.)	20	120	Q62703-Q4951 Q62703-Q4952	


LC TOPLED (Niedrigstrom)

LC TOPLED (Low Current)

	LS T679-D2E2-1 LS T679-E2F2-1 LS T679-F2G2-1	super-red	628	colorless clear	0.56 ... 1.12 0.90 ... 1.80 1.40 ... 2.80	2.5 (typ.) 3.9 (typ.) 6.1 (typ.)	2	120	Q62703-Q5098 Q62703-Q5099 Q62703-Q5100	1
	LY T679-D2E2-1 LY T679-E2F2-1 LY T679-F2G2-1	yellow	587	colorless clear	0.56 ... 1.12 0.90 ... 1.80 1.40 ... 2.80	2.5 (typ.) 3.9 (typ.) 6.1 (typ.)	2	120	Q62703-Q5136 Q62703-Q5137 Q62703-Q5138	
	LG T679-E1F1-1 LG T679-F1G2-1	green	570	colorless clear	0.71 ... 1.40 1.12 ... 2.80	3.1 (typ.) 5.5 (typ.)	2	120	Q62703-Q5016 Q62703-Q5017	

Mini TOPLED

Mini TOPLED

	LS M670-H2J2-1 LS M670-J2L1-1	super-red	628	colorless clear	3.55 ... 7.1 5.60 ... 14.0	15 (typ.) 28 (typ.)	10	120	Q62703-Q5083 Q62703-Q5084	5
	LO M670-H2J2-24 LO M670-J2L1-24	orange	606	colorless clear	3.55 ... 7.1 5.60 ... 14.0	15 (typ.) 28 (typ.)	10	120	Q62703-Q5038 Q62703-Q5039	
	LY M670-H2J2-26 LY M670-J2L1-26	yellow	587	colorless clear	3.55 ... 7.1 5.60 ... 14.0	15 (typ.) 28 (typ.)	10	120	Q62703-Q5121 Q62703-Q5122	
	LG M670-J2K2-1 LG M670-K2M1-1	green	570	colorless clear	5.60 ... 11.2 9.00 ... 22.4	25 (typ.) 45 (typ.)	10	120	Q62703-Q5006 Q62703-Q5007	
	LP M670-F2G2-1 LP M670-G2J1-1	pure green	560	colorless clear	1.40 ... 2.8 2.24 ... 5.6	6 (typ.) 11 (typ.)	10	120	Q62703-Q5060 Q62703-Q5061	

LUMINESZENZDIODEN

LIGHT EMITTING DIODES




SMT-LED

SMT-LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Farbe der Licht- austrittsfläche Color of light emitting area	at I_F			2 ϕ (typ.) (50% I_V) [deg].	Bestellnummer Ordering code	Fig.
					I_V [mcd]	Φ_V [mlm]				


Hyper Mini TOPLED

Hyper Mini TOPLED

	LS M676-N2P2-1 LS M676-P2R1-1	super-red	633	colorless clear	35.5 ... 71.0 56.0 ... 140.0	150 (typ.) 280 (typ.)	20	120	Q62703-Q5085 Q62703-Q5086	5
	LA M676-P2Q2-1 LA M676-Q2S1-1	amber	615	colorless clear	56.0 ... 112.0 90.0 ... 224.0	240 (typ.) 440 (typ.)	20	120	Q62703-Q4978 Q62703-Q4979	
	LO M676-Q1R1-24 LO M676-R1S2-24	orange	606	colorless clear	71.0 ... 140.0 112.0 ... 280.0	310 (typ.) 560 (typ.)	20	120	Q62703-Q5040 Q62703-Q5041	
	LY M676-P2Q2-26 LY M676-Q2S1-26	yellow	587	colorless clear	56.0 ... 112.0 90.0 ... 224.0	240 (typ.) 440 (typ.)	20	120	Q62703-Q5123 Q62703-Q5124	
	LB M676-J1K1 LB M676-K1L2	blue	465	colorless clear	4.5 ... 9.0 7.1 ... 18.0	20 (typ.) 36 (typ.)	10	120	Q62703-Q4990 Q62703-Q4991	
	LB M673-M1N1-35 LB M673-N1P2-35	blue	470	colorless clear	18.0 ... 35.5 28.0 ... 71.0	77 (typ.) 140 (typ.)	20	120	Q62703-Q4840 Q62703-Q4889	5
	LV M673-P2Q2-35 LV M673-Q2S1-35	verde	505	colorless clear	56.0 ... 112.0 90.0 ... 224.0	240 (typ.) 440 (typ.)	20	120	Q62703-Q4847 Q62703-Q4893	
	LT M673-Q1R1-35 LT M673-R1S2-35	true green	528	colorless clear	71.0 ... 140.0 112.0 ... 280.0	310 (typ.) 560 (typ.)	20	120	Q62703-Q4853 Q62703-Q4897	
	LW M673-Q1R1-35 LW M673-R1S1-35	white	x=0.32 y=0.31	colored diffused	71.0 ... 140.0 112.0 ... 224.0	310 (typ.) 490 (typ.)	20	120	Q62703-Q4861 Q62703-Q4901	


Mini TOPLED RG (Reverse Gullwing)

Mini TOPLED RG (Reverse Gullwing)

	LS M770-H2J2-1 LS M770-J2L1-1	super-red	628	colorless clear	3.55 ... 7.1 5.60 ... 14.0	15.0 (typ.) 28.0 (typ.)	10	120	Q62703-Q5087 Q62703-Q5088	6
	LO M770-H2J2-24 LO M770-J2L1-24	orange	606	colorless clear	3.55 ... 7.1 5.60 ... 14.0	15.0 (typ.) 28.0 (typ.)	10	120	Q62703-Q5042 Q62703-Q5043	
	LY M770-J1K1-26 LY M770-K1L2-26	yellow	587	colorless clear	4.50 ... 9.0 7.10 ... 18.0	20.0 (typ.) 36.0 (typ.)	10	120	Q62703-Q5125 Q62703-Q5126	
	LG M770-J2K2-1 LG M770-K2M1-1	green	570	colorless clear	5.60 ... 11.2 9.00 ... 22.4	25.0 (typ.) 45.0 (typ.)	10	120	Q62703-Q5008 Q62703-Q5009	
	LP M770-F2G2-1 LP M770-G2J1-1	pure green	560	colorless clear	1.40 ... 2.8 2.24 ... 5.6	6.1 (typ.) 11.0 (typ.)	10	120	Q62703-Q5062 Q62703-Q5063	


LC Mini TOPLED RG (Reverse Gullwing)

LC Mini TOPLED RG (Reverse Gullwing)

	LS M779-D1E1-1 LS M779-E1F1-1 LS M779-F1G2-1	super-red	628	colorless clear	0.45 ... 0.90 0.71 ... 1.40 1.12 ... 2.80	2.0 (typ.) 3.1 (typ.) 5.5 (typ.)	2	120	Q62703-Q5091 Q62703-Q5092 Q62703-Q5093	6
	LY M779-D1E1-1 LY M779-E1F1-1 LY M779-F1G1-1	yellow	587	colorless clear	0.45 ... 0.90 0.71 ... 1.40 1.12 ... 2.24	2.0 (typ.) 3.1 (typ.) 4.9 (typ.)	2	120	Q62703-Q5129 Q62703-Q5130 Q62703-Q5131	
	LG M779-CO	green	570	colorless clear	≥ 0.28 (1.0 typ.)	≥ 1.0 (typ.)	2	120	Q62703-Q3050	

Hyper Mini TOPLED RG (Reverse Gullwing)

Hyper Mini TOPLED RG (Reverse Gullwing)

	LS M776-N2P2-1 LS M776-P2R1-1	super-red	633	colorless clear	35.5 ... 71 56.0 ... 140	150 (typ.) 280 (typ.)	20	120	Q62703-Q5089 Q62703-Q5090	6
	LA M776-P2Q2-1 LA M776-Q2S1-1	amber	615	colorless clear	56.0 ... 112 90.0 ... 224	240 (typ.) 440 (typ.)	20	120	Q62703-Q4980 Q62703-Q4981	
	LO M776-Q1R1-24 LO M776-R1S2-24	orange	606	colorless clear	71.0 ... 140 112.0 ... 280	310 (typ.) 560 (typ.)	20	120	Q62703-Q5044 Q62703-Q5045	
	LY M776-P2Q2-26 LY M776-Q2S1-26	yellow	587	colorless clear	56.0 ... 112 90.0 ... 224	240 (typ.) 440 (typ.)	20	120	Q62703-Q5127 Q62703-Q5128	

LUMINESZENZDIODEN

LIGHT EMITTING DIODES


SMT-LED

SMT-LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Farbe der Licht- austrittsfläche Color of light emitting area	at I_F			2 ϕ (typ.) (50% I_V) [deg].	Bestellnummer Ordering code	Fig.
					I_V [mcd]	Φ_V [mlm]				


SIDELED

SIDELED

	LH A674-L2M2-1 LH A674-M2P1-1	hyper-red	645	colorless clear	14.00 ... 28.00 22.40 ... 56.00	62.0 (typ.) 110.0 (typ.)	10	120	Q62703-Q5022 Q62703-Q5023	8
	LS A670-H2J2-1 LS A670-J2L1-1	super-red	628	colorless clear	3.55 ... 7.10 5.60 ... 14.00	15.0 (typ.) 28.0 (typ.)	10	120	Q62703-Q5072 Q62703-Q5073	
	LO A670-J1K1-24 LO A670-K1L2-24	orange	606	colorless clear	4.50 ... 9.00 7.10 ... 18.00	20.0 (typ.) 36.0 (typ.)	10	120	Q62703-Q5030 Q62703-Q5031	
	LY A670-J1K1-26 LY A670-K1L2-26	yellow	587	colorless clear	4.50 ... 9.00 7.10 ... 18.00	20.0 (typ.) 36.0 (typ.)	10	120	Q62703-Q5109 Q62703-Q5110	
	LG A670-K1L1-1 LG A670-L1M2-1	green	570	colorless clear	7.10 ... 14.00 11.20 ... 28.00	31.0 (typ.) 56.0 (typ.)	10	120	Q62703-Q4998 Q62703-Q4999	
	LP A670-G1H1-1 LP A670-H1J2-1	pure green	560	colorless clear	1.80 ... 3.55 2.80 ... 7.10	7.7 (typ.) 14.0 (typ.)	10	120	Q62703-Q5054 Q62703-Q5055	

Super SIDELED


Super SIDELED

	LG A672-P1Q1-1 LG A672-Q1R2-1	green	570	colorless clear	45.0 ... 90.0 71.0 ... 180.0	190 (typ.) 350 (typ.)	50	120	Q62703-Q5000 Q62703-Q5001	8
	LP A672-L2M2-1 LP A672-M2P1-1	pure green	560	colorless clear	14.0 ... 28.0 22.4 ... 56.0	62 (typ.) 110 (typ.)	50	120	Q62703-Q5056 Q62703-Q5057	

■ Nicht für Neuentwicklungen / Not for new design

LC SIDELED (Niedrigstrom)

LC SIDELED (Low Current)

	LS A679-D2E2-1 LS A679-E2F2-1 LS A679-F2G2-1	super-red	628	colorless clear	0.56 ... 1.12 0.90 ... 1.80 1.40 ... 2.80	2.5 (typ.) 3.9 (typ.) 6.1 (typ.)	2	120	Q62703-Q5076 Q62703-Q5077 Q62703-Q5078	8
	LY A679-D2E2-1 LY A679-E2G1-1	yellow	587	colorless clear	0.56 ... 1.12 0.90 ... 2.24	2.5 (typ.) 4.4 (typ.)	2	120	Q62703-Q5113 Q62703-Q5114	
	LG A679-E1F1-1 LG A679-F1G2-1	green	570	colorless clear	0.71 ... 1.40 1.12 ... 2.80	3.1 (typ.) 5.5 (typ.)	2	120	Q62703-Q5002 Q62703-Q5003	

LUMINESZENZDIODEN

LIGHT EMITTING DIODES






SMT-LED

SMT-LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Farbe der Licht- austrittsfläche Color of light emitting area	at I_F			2 ϕ (typ.) (50% I_V) [deg].	Bestellnummer Ordering code	Fig.
					I_V [mcd]	Φ_V [mlm]				


Hyper SIDELED

Hyper SIDELED

	LS A676-N2P2-1 LS A676-P2R1-1	super-red	633	colorless clear	35.5 ... 71.0 56.0 ... 140.0	150 (typ.) 280 (typ.)	20	120	Q62703-Q5074 Q62703-Q5075	8
	LA A676-Q1R1-1 LA A676-R1S2-1	amber	615	colorless clear	71.0 ... 140.0 112.0 ... 280.0	310 (typ.) 560 (typ.)	20	120	Q62703-Q4972 Q62703-Q4973	
	LO A676-Q1R1-24 LO A676-R1S2-24	orange	606	colorless clear	71.0 ... 140.0 112.0 ... 280.0	310 (typ.) 560 (typ.)	20	120	Q62703-Q5032 Q62703-Q5033	
	LY A676-P2Q2-26 LY A676-Q2S1-26	yellow	587	colorless clear	56.0 ... 112.0 90.0 ... 224.0	240 (typ.) 440 (typ.)	20	120	Q62703-Q5111 Q62703-Q5112	
	LB A676-J2K2-1 LB A676-K2M1-1	blue	465	colorless clear	5.6 ... 11.2 9.0 ... 22.4	25 (typ.) 45 (typ.)	10	120	Q62703-Q4986 Q62703-Q4987	
	LY A675-S1T2-26	yellow	587	colorless clear	180.0 ... 450.0	900 (typ.)	30	120	Q62703-Q5154	8
	LO A67B-T1U2-24	orange	606	colorless clear	280.0 ... 710.0	1500 (typ.)	30	120	Q62703-Q6009	
	LB A673-M2N2-35 LB A673-N2Q1-35	blue	470	colorless clear	22.4 ... 45.0 35.5 ... 90.0	100 (typ.) 180 (typ.)	20	120	Q62703-Q4839 Q62703-Q4888	8
	LV A673-Q1R1-35 LV A673-R1S2-35	verde	505	colorless clear	71.0 ... 140.0 112.0 ... 280.0	310 (typ.) 560 (typ.)	20	120	Q62703-Q4846 Q62703-Q4892	
	LT A673-Q2R2-35 LT A673-R2T1-35	true green	528	colorless clear	90.0 ... 180.0 140.0 ... 355.0	390 (typ.) 700 (typ.)	20	120	Q62703-Q4852 Q62703-Q4896	
	LW A676-M1N1-35 LW A676-N1P2-35	white	x=0.30 y=0.32	colored diffused	18.0 ... 35.5 28.0 ... 71.0	77 (typ.) 140 (typ.)	10	120	Q62703-Q5105 Q62703-Q5106	8
	LW A673-Q2R2-35 LW A673-R2S2-35	white	x=0.32 y=0.31	colored diffused	90.0 ... 180.0 140.0 ... 280.0	390 (typ.) 610 (typ.)	20	120	Q62703-Q4860 Q62703-Q4900	

Mini SIDELED

Mini SIDELED

	LS C870-H2J2-1 LS C870-J2L1-1	super-red	628	colorless clear	3.55 ... 7.1 5.60 ... 14.0	15.0 (typ.) 28.0 (typ.)	10	120	Q62703-Q5079 Q62703-Q5080	9
	LO C870-H2J2-24 LO C870-J2L1-24	orange	606	colorless clear	3.55 ... 7.1 5.60 ... 14.0	15.0 (typ.) 28.0 (typ.)	10	120	Q62703-Q5034 Q62703-Q5035	
	LY C870-H2J2-26 LY C870-J2L1-26	yellow	587	colorless clear	3.55 ... 7.1 5.60 ... 14.0	15.0 (typ.) 28.0 (typ.)	10	120	Q62703-Q5115 Q62703-Q5116	
	LG C870-J2K2-1 LG C870-K2M1-1	green	570	colorless clear	5.60 ... 11.2 9.00 ... 22.4	25.0 (typ.) 45.0 (typ.)	10	120	Q62703-Q5004 Q62703-Q5005	
	LP C870-F2G2-1 LP C870-G2J1-1	pure green	560	colorless clear	1.40 ... 2.8 2.24 ... 5.6	6.1 (typ.) 11.0 (typ.)	10	120	Q62703-Q5058 Q62703-Q5059	

■ Nicht für Neuentwicklungen / Not for new design

LUMINESZENZDIODEN

LIGHT EMITTING DIODES

SMT-LED

SMT-LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Farbe der Licht- austrittsfläche Color of light emitting area	at I_F			2 ϕ (typ.) (50% I_V) [deg].	Bestellnummer Ordering code	Fig.
					I_V [mcd]	Φ_V [mlm]				

Hyper Mini SIDELED






Hyper Mini SIDELED

	LS C876-N2P2-1 LS C876-P2R1-1	super-red	633	colorless clear	35.5 ... 71.0 56.0 ... 140.0	150 (typ.) 280 (typ.)	20	120	Q62703-Q5081 Q62703-Q5082	9
	LA C876-P2Q2-1 LA C876-Q2S1-1	amber	615	colorless clear	56.0 ... 112.0 90.0 ... 224.0	240 (typ.) 440 (typ.)	20	120	Q62703-Q4974 Q62703-Q4975	
	LO C876-P2Q2-24 LO C876-Q2S1-24	orange	606	colorless clear	56.0 ... 112.0 90.0 ... 224.0	240 (typ.) 440 (typ.)	20	120	Q62703-Q5036 Q62703-Q5037	
	LY C876-P2Q2-26 LY C876-Q2S1-26	yellow	587	colorless clear	56.0 ... 112.0 90.0 ... 224.0	240 (typ.) 440 (typ.)	20	120	Q62703-Q5117 Q62703-Q5118	
	LB C876-J1K1-1 LB C876-K1L2-1	blue	465	colorless clear	4.5 ... 9.0 7.1 ... 18.0	20 (typ.) 36 (typ.)	10	120	Q62703-Q4988 Q62703-Q4989	
	LB C873-M1N1-35	blue	470	colorless clear	18.0 ... 35.5	80 (typ.)	20	120	on request	
	LT C873-N2P2-35 LT C873-P2Q2-35	true green	528	colorless clear	35.5 ... 71.0 56.0 ... 112.0	160 (typ.) 250 (typ.)	20	120	on request on request	

■ Nicht für Neuentwicklungen / Not for new design

Micro SIDELED

Micro SIDELED

	LS Y876-N1P1-1 LS Y876-P1Q2-1	super-red	633	colorless clear	28.0 ... 56.0 45.0 ... 112.0	120 (typ.) 230 (typ.)	20	120	Q62703-Q6195 Q62703-Q6196	10
	LA Y876-P1Q1-1 LA Y876-Q1R2-1	amber	615	colorless clear	45.0 ... 90.0 71.0 ... 180.0	200 (typ.) 370 (typ.)	20	120	Q62703-Q6193 Q62703-Q6194	
	LO Y876-P2Q2-24 LO Y876-Q2S1-24	orange	606	colorless clear	56.0 ... 112.0 90.0 ... 224.0	240 (typ.) 440 (typ.)	20	120	Q62703-Q6199 Q62703-Q6200	
	LY Y876-P1Q1-26 LY Y876-Q1R2-26	yellow	587	colorless clear	45.0 ... 90.0 71.0 ... 180.0	200 (typ.) 370 (typ.)	20	120	Q62703-Q6197 Q62703-Q6198	
	LG Y870-J2K2-1 LG Y870-K2M1-1	green	570	colorless clear	5.6 ... 11.2 9.0 ... 22.4	25 (typ.) 45 (typ.)	10	120	Q62703-Q6189 Q62703-Q6190	
	LB Y876-J1K1 LB Y876-K1L2	blue	465	colorless clear	4.5 ... 9.0 7.1 ... 18.0	20 (typ.) 36 (typ.)	10	120	Q62703-Q6185 Q62703-Q6186	
	LB Y87S-K1L1-35 LB Y87S-L1M2-35	blue	470	colorless clear	7.1 ... 14.0 11.2 ... 28.0	30 (typ.) 50 (typ.)	10	120	Q62703-Q6187 Q62703-Q6188	
	LT Y87S-N1P1-35 LT Y87S-P1Q2-35	true green	528	colorless clear	28.0 ... 56.0 45.0 ... 112.0	120 (typ.) 230 (typ.)	10	120	Q62703-Q6191 Q62703-Q6192	
	LW Y87C-R2S1-35 LW Y87C-S2T1-35	white	x=0.33 y=0.33	colored diffused	140.0 ... 224.0 224.0 ... 355.0	550 (typ.) 1000 (typ.)	20	120	Q62703-Q6393 Q62703-Q6394	
	LW Y87S-N1Q2-1	white	x=0.33 y=0.33	colored diffused	28.0 ... 112.0	210 (typ.)	10	120	Q62703-Q6139	


LUMINESZENZDIODEN

LIGHT EMITTING DIODES

Package	Type	I_V mcd		I_F mA	λ_{peak} nm	λ_{dom} nm	$\Delta\lambda$ nm	V_F V		I_F max mA	P_{tot} mW	$R_{th,JA}$ K/W	Color of package	Ordering code	Fig.
		min	max					typ.	max						

Mini TOPLED RG (Reverse Gullwing) through-hole

Mini TOPLED RG (Reverse Gullwing) through-hole

	LG M470-J2K2-1	5.6	11.2	10	572	570	25	2.0	2.6	30	95	480	colorless clear	Q62703-Q6023 Q62703-Q6166	7
	LG M470-K2M1-1	9.0	22.4												

LUMINESZENZDIODEN

LIGHT EMITTING DIODES


SMT-LED

SMT-LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Farbe der Licht- austrittsfläche Color of light emitting area	I_V [mcd]		at I_F [mA]	2 ϕ (typ.) (50% I_V) [deg.]	Bestellnummer Ordering code	Fig.
					color 1	color 2				

Multi TOPLED

Multi TOPLED

	LSG T670 LSG T670-J+J LSG T670-J+K LSG T670-J+L LSG T670-K+J LSG T670-K+K LSG T670-K+L LSG T670-L+J LSG T670-L+K LSG T670-L+L	super-red/ green	628/ 570	colorless clear	≥ 4.5 (8 typ.) 4.5 ... 7.1 4.5 ... 7.1 4.5 ... 7.1 7.1 ... 11.2 7.1 ... 11.2 7.1 ... 11.2 11.2 ... 18.0 11.2 ... 18.0 11.2 ... 18.0	≥ 4.5 (10 typ.) 4.5 ... 7.1 7.1 ... 11.2 11.2 ... 18.0 4.5 ... 7.1 7.1 ... 11.2 11.2 ... 18.0 4.5 ... 7.1 7.1 ... 11.2 11.2 ... 18.0	10	120	Q62703-Q4316	11
	LSY T670 LSY T670-J+J LSY T670-J+K LSY T670-J+L LSY T670-K+J LSY T670-K+K LSY T670-K+L LSY T670-L+J LSY T670-L+K LSY T670-L+L	super-red/ yellow	628/ 587	colorless clear	≥ 4.5 (8 typ.) 4.5 ... 7.1 4.5 ... 7.1 4.5 ... 7.1 7.1 ... 11.2 7.1 ... 11.2 7.1 ... 11.2 11.2 ... 18.0 11.2 ... 18.0 11.2 ... 18.0	≥ 4.5 (10 typ.) 4.5 ... 7.1 7.1 ... 11.2 11.2 ... 18.0 4.5 ... 7.1 7.1 ... 11.2 11.2 ... 18.0 4.5 ... 7.1 7.1 ... 11.2 11.2 ... 18.0	10	120	Q62703-Q4317	
	LSP T670 LSP T670-H+G LSP T670-H+H LSP T670-J+G LSP T670-J+H LSP T670-J+J LSP T670-K+G LSP T670-K+H LSP T670-K+J	super-red/ pure green	628/ 560	colorless clear	≥ 4.5 (8 typ.) 2.8 ... 4.5 2.8 ... 4.5 4.5 ... 7.1 4.5 ... 7.1 4.5 ... 7.1 7.1 ... 11.2 7.1 ... 11.2 7.1 ... 11.2	≥ 1.8 (3 typ.) 1.8 ... 2.8 2.8 ... 4.5 1.8 ... 2.8 2.8 ... 4.5 4.5 ... 7.1 1.8 ... 2.8 2.8 ... 4.5 4.5 ... 7.1	10	120	Q62703-Q4318	
	LYG T670 LYG T670-J+J LYG T670-J+K LYG T670-J+L LYG T670-K+J LYG T670-K+K LYG T670-K+L LYG T670-L+J LYG T670-L+K LYG T670-L+L	yellow/ green	587/ 570	colorless clear	≥ 4.5 (8 typ.) 4.5 ... 7.1 4.5 ... 7.1 4.5 ... 7.1 7.1 ... 11.2 7.1 ... 11.2 7.1 ... 11.2 11.2 ... 18.0 11.2 ... 18.0 11.2 ... 18.0	≥ 4.5 (10 typ.) 4.5 ... 7.1 7.1 ... 11.2 11.2 ... 18.0 4.5 ... 7.1 7.1 ... 11.2 11.2 ... 18.0 4.5 ... 7.1 7.1 ... 11.2 11.2 ... 18.0	10	120	Q62703-Q4502	
	LOP T670 LOP T670-J+G LOP T670-J+H LOP T670-J+J LOP T670-K+G LOP T670-K+H LOP T670-K+J	orange/ pure green	606/ 560	colorless clear	≥ 4.5 (8 typ.) 4.5 ... 7.1 4.5 ... 7.1 4.5 ... 7.1 7.1 ... 11.2 7.1 ... 11.2 7.1 ... 11.2	≥ 1.8 (3 typ.) 1.8 ... 2.8 2.8 ... 4.5 4.5 ... 7.1 1.8 ... 2.8 2.8 ... 4.5 4.5 ... 7.1	10	120	Q62703-Q4319	
	LOG T671 LOG T671-J+K LOG T671-J+L LOG T671-J+M LOG T671-K+K LOG T671-K+L LOG T671-K+M LOG T671-L+M	orange/ green	606/ 570	colorless clear	≥ 4.5 (8 typ.) 4.5 ... 7.1 4.5 ... 7.1 4.5 ... 7.1 7.1 ... 11.2 7.1 ... 11.2 7.1 ... 11.2 11.2 ... 18.0 11.2 ... 18.0	≥ 7.1 (13 typ.) 7.1 ... 11.2 11.2 ... 18.0 18.0 ... 28.0 7.1 ... 11.2 11.2 ... 18.0 18.0 ... 28.0 18.0 ... 28.0	10	120	Q62703-Q4320	
	LSG T671 LSG T671-J+K LSG T671-J+L LSG T671-J+M LSG T671-K+K LSG T671-K+L LSG T671-K+M LSG T671-L+K LSG T671-L+L LSG T671-L+M	super-red/ green	628/ 570	colorless clear	≥ 4.5 (8 typ.) 4.5 ... 7.1 4.5 ... 7.1 4.5 ... 7.1 7.1 ... 11.2 7.1 ... 11.2 7.1 ... 11.2 11.2 ... 18.0 11.2 ... 18.0 11.2 ... 18.0	≥ 7.1 (13 typ.) 7.1 ... 11.2 11.2 ... 18.0 18.0 ... 28.0 7.1 ... 11.2 11.2 ... 18.0 18.0 ... 28.0 7.1 ... 11.2 11.2 ... 18.0 18.0 ... 28.0	10	120	Q62703-Q4321	

Nicht für Neuentwicklungen / Not for new design

LUMINESZENZDIODEN

LIGHT EMITTING DIODES



SMT-LED


SMT-LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Farbe der Licht- austrittsfläche Color of light emitting area	I_V [mcd]			2 ϕ (typ.) (50% I_V) [deg].	Bestellnummer Ordering code	Fig.
					color 1	color 2	at I_F [mA]			

Hyper Multi TOPLED

Hyper Multi TOPLED

	LSY T676				45 ... 112	45 ... 180	20	120	Q62703-Q3428	11
	LSY T676-P+P	super-red/	633/ 587	colorless clear	45 ... 71	45 ... 71				
	LSY T676-P+Q	yellow			45 ... 71	71 ... 112				
	LSY T676-P+R				45 ... 71	112 ... 180				
	LSY T676-Q+Q				71 ... 112	71 ... 112				
LSY T676-Q+R		71 ... 112			112 ... 180					
	LHG T680				11.2 ... 28.0	7.1 ... 28.0	10	120	on request	12
	LHG T680-L+K	hyper-red/	645/ 570	colorless clear and black painted package surface	11.2 ... 18.0	7.1 ... 11.2				
	LHG T680-L+L				11.2 ... 18.0	11.2 ... 18.0				
	LHG T680-L+M	green			11.2 ... 18.0	18.0 ... 28.0				
	LHG T680-M+K				18.0 ... 28.0	7.1 ... 11.2				
	LHG T680-M+L				18.0 ... 28.0	11.2 ... 18.0				
LHG T680-M+M		18.0 ... 28.0			18.0 ... 28.0					

					color 1	color 2	color 3					
	LHGB T686				7.1 ... 11.2	7.1 ... 11.2	7.1 ... 11.2	10	120	Q62703-Q5771	13	
	-K+K+K	hyper-red/	645/ 570/ 465	colorless clear and black painted package surface	7.1 ... 11.2	7.1 ... 11.2	11.2 ... 18.0					
	-K+K+L				7.1 ... 11.2	11.2 ... 18.0	7.1 ... 11.2					
	-K+L+K	green/			7.1 ... 11.2	11.2 ... 18.0	11.2 ... 18.0					
	-K+L+L	blue			7.1 ... 11.2	11.2 ... 18.0	11.2 ... 18.0					
	-L+K+K				11.2 ... 18.0	7.1 ... 11.2	7.1 ... 11.2					
	-L+K+L				11.2 ... 18.0	7.1 ... 11.2	11.2 ... 18.0					
	-L+L+K				11.2 ... 18.0	11.2 ... 18.0	7.1 ... 11.2					
	-L+L+L				11.2 ... 18.0	11.2 ... 18.0	11.2 ... 18.0					
	LATB T66B	amber/ true green/ blue			617/ 528/ 470	colorless diffused and black painted package surface	180 ... 450					180 ... 450
LATB T686						71 ... 112	112 ... 180	7.1 ... 11.2	20	120	Q62703-Q5759	13
-Q+R+K	amber/	617/ 528/ 465	colorless clear and black painted package surface	71 ... 112	112 ... 180	11.2 ... 18.0						
-Q+R+L				71 ... 112	180 ... 280	7.1 ... 11.2						
-Q+S+K	true green/			71 ... 112	180 ... 280	11.2 ... 18.0						
-Q+S+L	blue			112 ... 180	112 ... 180	7.1 ... 11.2						
-R+R+K				112 ... 180	112 ... 180	7.1 ... 11.2						
-R+R+L				112 ... 180	112 ... 180	11.2 ... 18.0						
-R+S+K				112 ... 180	180 ... 280	7.1 ... 11.2						
-R+S+L				112 ... 180	180 ... 280	11.2 ... 18.0						
LATB T683						71 ... 112	112 ... 180	18 ... 28				
-Q+R+M	amber/			617/ 528/ 470	colorless clear and black painted package surface	71 ... 112	112 ... 180	28 ... 45				
-Q+R+N		71 ... 112	180 ... 280			18 ... 28						
-Q+S+M	true green/	71 ... 112	180 ... 280			28 ... 45						
-Q+S+N	blue	112 ... 180	112 ... 180			18 ... 28						
-R+R+M		112 ... 180	112 ... 180			28 ... 45						
-R+R+N		112 ... 180	180 ... 280			18 ... 28						
-R+S+M		112 ... 180	180 ... 280			18 ... 28						
-R+S+N		112 ... 180	180 ... 280			28 ... 45						

LUMINESZENZDIODEN

LIGHT EMITTING DIODES



SMT-LED

SMT-LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Farbe der Licht- austrittsfläche Color of light emitting area	I_V [mcd]			2 ϕ (typ.) (50% I_V) [deg].	Bestellnummer Ordering code	Fig.
					color 1	color 2	at I_F [mA]			


Multi TOPLED (Kathoden auf einer Seite)

Multi TOPLED (Cathodes on one side)

	LSG T677		628/ 570	colorless clear	4.5 ... 18.0	4.5 ... 18.0	10	120	Q62703-Q4327	12
	LSG T677-J+J				4.5 ... 7.1	4.5 ... 7.1				
	LSG T677-J+K				4.5 ... 7.1	7.1 ... 11.2				
	LSG T677-J+L	super-red/			4.5 ... 7.1	11.2 ... 18.0				
	LSG T677-K+J	green			7.1 ... 11.2	4.5 ... 7.1				
	LSG T677-K+K				7.1 ... 11.2	7.1 ... 11.2				
	LSG T677-K+L				7.1 ... 11.2	11.2 ... 18.0				
	LSG T677-L+J				11.2 ... 18.0	4.5 ... 7.1				
	LSG T677-L+K				11.2 ... 18.0	7.1 ... 11.2				
LSG T677-L+L		11.2 ... 18.0	11.2 ... 18.0							
	LSB T676		633/ 467	colorless clear	18.0 ... 71.0	4.5 ... 18.0	10	120	Q62703-Q5895	11
	LSB T676-M+J				18.0 ... 28.0	4.5 ... 7.1				
	LSB T676-M+K				18.0 ... 28.0	7.1 ... 11.2				
	LSB T676-M+L	super-red/			18.0 ... 28.0	11.2 ... 18.0				
	LSB T676-N+J	blue			28.0 ... 45.0	4.5 ... 7.1				
	LSB T676-N+K				28.0 ... 45.0	7.1 ... 11.2				
	LSB T676-N+L				28.0 ... 45.0	11.2 ... 18.0				
	LSB T676-P+J				45.0 ... 71.0	4.5 ... 7.1				
	LSB T676-P+K				45.0 ... 71.0	7.1 ... 11.2				
LSB T676-P+L		45.0 ... 71.0	11.2 ... 18.0							


Multi TOPLED RG (Reverse Gullwing)

Multi TOPLED RG (Reverse Gullwing)

	LSG T770		628/ 570	colorless clear	4.5 ... 18.0	4.5 ... 18.0	10	120	Q62703-Q4328	14
	LSG T770-J+J				4.5 ... 7.1	4.5 ... 7.1				
	LSG T770-J+K				4.5 ... 7.1	7.1 ... 11.2				
	LSG T770-J+L	super-red/			4.5 ... 7.1	11.2 ... 18.0				
	LSG T770-K+J	green			7.1 ... 11.2	4.5 ... 7.1				
	LSG T770-K+K				7.1 ... 11.2	7.1 ... 11.2				
	LSG T770-K+L				7.1 ... 11.2	11.2 ... 18.0				
	LSG T770-L+J				11.2 ... 18.0	4.5 ... 7.1				
	LSG T770-L+K				11.2 ... 18.0	7.1 ... 11.2				
	LSG T770-L+L				11.2 ... 18.0	11.2 ... 18.0				


Multi SIDELED







Multi SIDELED

	LOG A671		606/ 570	colorless clear	4.5 ... 18.0	7.1 ... 28.0	10	120	Q62703-Q4322	15
	LOG A671-J+K				4.5 ... 7.1	7.1 ... 11.2				
	LOG A671-J+L				4.5 ... 7.1	11.2 ... 18.0				
	LOG A671-J+M	orange/			4.5 ... 7.1	18.0 ... 28.0				
	LOG A671-K+K	green			7.1 ... 11.2	7.1 ... 11.2				
	LOG A671-K+L				7.1 ... 11.2	11.2 ... 18.0				
	LOG A671-K+M				7.1 ... 11.2	18.0 ... 28.0				
	LOG A671-L+M				11.2 ... 18.0	18.0 ... 28.0				
	LSG A671				628/ 570	colorless clear				
LSG A671-J+K		4.5 ... 7.1	7.1 ... 11.2							
LSG A671-J+L		4.5 ... 7.1	11.2 ... 18.0							
LSG A671-J+M	super-red/	4.5 ... 7.1	18.0 ... 28.0							
LSG A671-K+K	green	7.1 ... 11.2	7.1 ... 11.2							
LSG A671-K+L		7.1 ... 11.2	11.2 ... 18.0							
LSG A671-K+M		7.1 ... 11.2	18.0 ... 28.0							
LSG A671-L+K		11.2 ... 18.0	7.1 ... 11.2							
LSG A671-L+L		11.2 ... 18.0	11.2 ... 18.0							
LSG A671-L+M		11.2 ... 18.0	18.0 ... 28.0							

Hyper Multi SIDELED

Hyper Multi SIDELED

	LSY A676		633/ 587	colorless clear	45 ... 112	45 ... 180	20	120	Q62703-Q3374	15
	LSY A676-P+P				45 ... 71	45 ... 71				
	LSY A676-P+Q	super-red/			45 ... 71	71 ... 112				
	LSY A676-P+R	yellow			45 ... 71	112 ... 180				
	LSY A676-Q+Q				71 ... 112	71 ... 112				
	LSY A676-Q+R				71 ... 112	112 ... 180				

SmartLED™		SmartLED™								
	LS L896-M1N1-1 LS L896-N1P2-1	super-red	633	colorless clear	18.0 ... 35.5 28.0 ... 71.0	105 (typ.) 200 (typ.)	20	160	Q62703-Q6020 Q62703-Q6160	16
	LA L896-P1Q1-1 LA L896-Q1R2-1	amber	615	colorless clear	45.0 ... 90.0 71.0 ... 180.0	270 (typ.) 500 (typ.)	20	160	Q62703-Q6203 Q62703-Q6204	
	LO L896-P1Q1-24 LO L896-Q1R2-24	orange	606	colorless clear	45.0 ... 90.0 71.0 ... 180.0	270 (typ.) 500 (typ.)	20	160	Q62703-Q6207 Q62703-Q6208	
	LY L896-P1Q1-26 LY L896-Q1R2-26	yellow	587	colorless clear	45.0 ... 90.0 71.0 ... 180.0	270 (typ.) 500 (typ.)	20	160	Q62703-Q6021 Q62703-Q6164	
	LG L890-K1L1-1 LG L890-L1M2-1	green	570	colorless clear	7.1 ... 14.0 11.2 ... 28.0	40 (typ.) 80 (typ.)	20	160	Q62703-Q6022 Q62703-Q6156	
		LB L89S-K1L1-35 LB L89S-L1M2-35	blue	470	colorless clear	7.1 ... 14.0 11.2 ... 28.0	40 (typ.) 80 (typ.)	10	160	
		LT L89S-M2N2-35 LT L89S-N2Q1-35	true green	528	colorless clear	22.4 ... 45.0 35.5 ... 90.0	135 (typ.) 250 (typ.)	20	160	
		LB L893-L1M1-35 LB L893-M1N2-35	blue	470	colorless clear	11.2 ... 22.4 18.0 ... 45.0	65 (typ.) 125 (typ.)	20	160	
		LT L893-P1Q1-35 LT L893-Q1R2-35	true green	528	colorless clear	45.0 ... 90.0 71.0 ... 180.0	270 (typ.) 500 (typ.)	20	160	

LUMINESZENZDIODEN

LIGHT EMITTING DIODES

CHIPLED

$I_F = 20 \text{ mA}$, $T_A = 25 \text{ °C}$


CHIPLED

$I_F = 20 \text{ mA}$, $T_A = 25 \text{ °C}$

Package	Type	I_V mcd		I_F mA	λ_{peak} nm	λ_{dom} nm	$\Delta\lambda$ nm	V_F V		I_F max mA	P_{tot} mW	R_{thJA} K/W	Color of package	Ordering code	Fig.
		min	typ					typ	max						



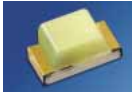
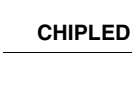
CHIPLED 0603

CHIPLED 0603

	LG Q971	7.1	10	20	572	570	30	2.2	2.6	25	65	800	colorless diffused	Q62702-P5189	20
	LY Q971	2.8	6.0	20	589	590	40	2.2	2.6	20	65	800	colorless diffused	Q62702-P4699	



Hyper CHIPLED 0603

Hyper CHIPLED 0603

	LB Q99A	1.8	6.0	10	428	465	60	3.5	4.2	15	70	700	colorless clear	Q62702-P5184	21
	LB Q993-JK-1	4.5	11.2 (max) 28.0 (max)	10	465	470	25	3.4	3.9	15	60	650	colorless clear	Q62702-P5438	
	LB Q993-KM-1	7.1		28.0 (max)	25	3.4	3.9	15	60	650	colorless clear	Q62702-P5439			
	LT Q993	28	70	10	523	531	33	3.2	3.8	15	60	650	colorless clear	Q62702-P5328	20
	LO Q996-1	35.5	70	20	610	606	16	2.0	2.5	25	65	900	colorless clear	Q62702-P5337	
	LY Q976	28	60	20	591	587	15	2.0	2.5	25	65	900	colorless diffused	Q62702-P5186	20
	LS Q976	18	50	20	645	633	16	2.0	2.5	25	65	900	colorless diffused	Q62702-P5187	
	LW Q98A	7.1	15	10	$C_x=0.30$	$C_y=0.33$	–	3.5	4.2	15	70	700	colored diffused	Q62702-P5185	21
	LW Q983	5	15	6	$C_x=0.35$	$C_y=0.34$	–	3.3	3.7	15	60	650	colored diffused	Q62702-P5225	
	LW Q18S	5	15	6	$C_x=0.35$	$C_y=0.34$	–	3.3	3.7	15	60	650	colored diffused	Q62702-P5407	

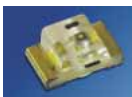
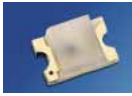

CHIPLED 0805

CHIPLED 0805

	LG R971-KL	7.1	18.0 (max)	20	572	570	30	2.2	2.6	25	65	800	colorless diffused	Q62702-P5436	18
	LG R971-LM													11.2	
	LO R971	2.8	6	20	610	605	35	2.1	2.6	25	65	800	colorless diffused	Q62702-P5180	
	LY R971	2.8	6	20	589	587	40	2.2	2.6	20	65	800	colorless diffused	Q62702-P5181	
	LH R974	11.2	15	20	660	645	20	1.8	2.6	30	80	800	colorless diffused	Q62702-P5182	17

Hyper CHIPLED 0805

Hyper CHIPLED 0805

	LB R99A	2.8	10	20	428	465	60	3.8	4.5	20	90	680	colorless clear	Q62702-P5175	19
	LO R976	28	70	20	610	606	16	2.0	2.5	25	65	800	colorless diffused	Q62702-P5176	18
	LY R976	28	60	20	591	588	15	2.0	2.5	25	65	800	colorless diffused	Q62702-P5177	
	LS R976	18	50	20	645	633	16	2.0	2.5	25	65	800	colorless diffused	Q62702-P5178	
	LW R98A	11.2	25	20	$C_x=0.32$	$C_y=0.34$	–	3.8	4.5	20	90	680	colored diffused	Q62702-P5183	19

LUMINESZENZDIODEN

LIGHT EMITTING DIODES

CHIPLED

$I_F = 20 \text{ mA}$, $T_A = 25 \text{ °C}$

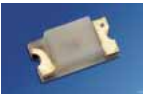
CHIPLED

$I_F = 20 \text{ mA}$, $T_A = 25 \text{ °C}$

Package	Type	I_V mcd		I_F mA	λ_{peak} nm	λ_{dom} nm	$\Delta\lambda$ nm	V_F V		I_F max mA	P_{tot} mW	R_{thJA} K/W	Color of package	Ordering code	Fig.
		min	typ					typ	max						

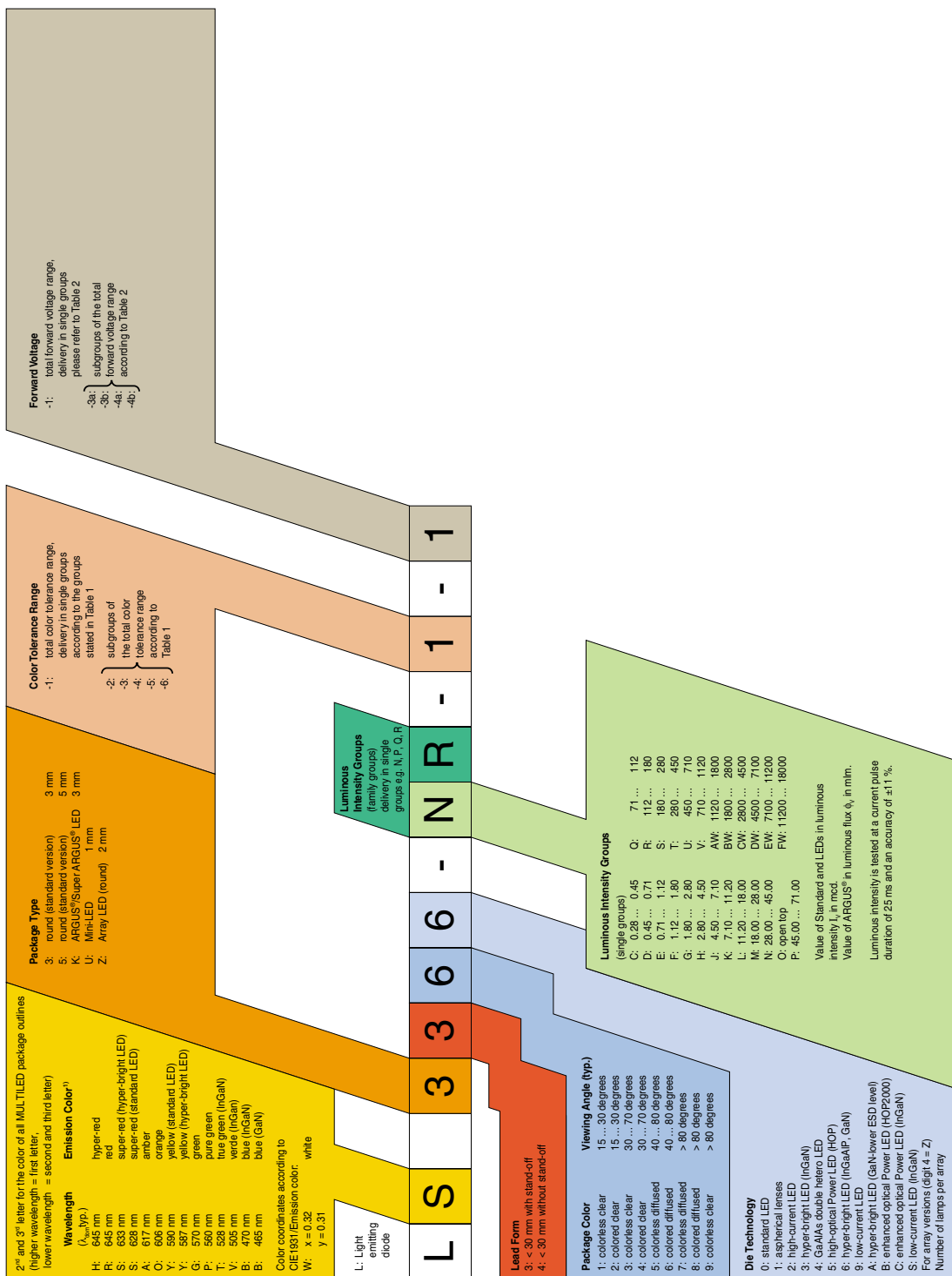
CHIPLED 1206

CHIPLED 1206

	LG N971	7.1	10	20	572	570	30	2.2	2.6	25	65	750	colorless diffused	Q62702-P5191	23
	LY N971	2.8	6	20	589	587	40	2.2	2.6	20	65	750	colorless diffused	Q62702-P5193	
	LH N974	7.1	15	20	660	645	20	1.8	2.6	30	80	750	colorless diffused	Q62702-P5192	

Radial-LED-Typenbezeichnungsschema

Radial LED type designation system



Gurtung von Lumineszenzdiolen

Alle radialen LED können in verschiedenen Gurtvarianten, sowohl nach IEC-Norm 286.2 und 3 als auch nach speziellen Gurtspezifikationen geliefert werden (siehe Kapitel „Gurtung und Verpackung“).

¹⁾ U: gilt für nur 5 mm MULTILED

Taping of LEDs

All unidirectional LEDs are available in various tape forms, including IEC publication 286.2 and 3 or special tape specifications (see also chapter “Tape and Reel”).

¹⁾ U: is valid only for 5 mm MULTILED

HINWEISE

Parameter des OSRAM LED-Helligkeitsgruppen-Schemas für radiale LEDs

All LEDs werden in Helligkeitsgruppen $I_{Vmax} / I_{Vmin} \leq$ Faktor 2 gemessen bzw. maximale Helligkeitsstreuung:

ganze Helligkeit: $\pm 33\%$
halbe Helligkeit: $\pm 23\%$ (auf Anfrage)

Helligkeitsgruppen und Werte siehe Seite 83 Typenbezeichnungsschema.

1. In einer Verpackungseinheit/Gurt ist immer nur eine Helligkeitsgruppe!
Max. Streubreite der Helligkeit innerhalb einer Verpackungseinheit
 $I_{Vmin} : I_{Vmax}$ bzw. $\Phi_{Vmin} : \Phi_{Vmax} = 1 : 2$
2. Die Standardlieferform von Serientypen beinhaltet eine untere bzw. eine obere Familiengruppe oder 2 bis 4 Einzelgruppen.
3. Die 2 bis 4 Einzelgruppen decken 60 bis 80%, die beiden Familiengruppen 100% der Gesamthelligkeit ab.

Beispiel für Gruppierungsschema:

LS 3366 - NR untere Familiengruppe
- P Einzelgruppe
- Q Einzelgruppe
- R Einzelgruppe
- PS obere Familiengruppe

Untere Familiengruppe: Der mögliche Lieferumfang beinhaltet die Helligkeitsgruppen N, P, Q, R

Obere Familiengruppe: Der mögliche Lieferumfang beinhaltet die Helligkeitsgruppen P, Q, R, S

Einzelgruppen:

Die technologiebedingte Helligkeits-Streuung der heutigen LED-Herstellprozesse über einen längeren Fertigungszeitraum (Halbleitermaterial - Chipherstellung - Montageprozeß), erlaubt keine Zusage einer einzelnen Helligkeitsgruppe.

Daher müssen mindestens 2 Helligkeitsgruppen vorgesehen werden!

Auf Grund von kontinuierlichen Verbesserungen unserer Chip- und LED-Herstellungsprozesse werden sich die LED-Helligkeiten nach oben entwickeln. Über dadurch notwendige Anpassungen der Helligkeitsgruppen werden wir Sie rechtzeitig informieren.

Wenn mehr als 2 Einzelgruppen angeboten werden, muß eine Abstimmung mit Ihrem Osram OS-Partner bezüglich der Hauptverteilung erfolgen.

Bei besonders kritischen Anwendungen besteht die Möglichkeit, eine noch engere Selektion (Helligkeits-Halbgruppen / Wellenlängengruppe) durchzuführen. Die Anzahl der Liefergruppen vervielfacht sich dadurch.

Goldene Bestellregel für Einzelgruppen zur Sicherstellung einer kontinuierlichen LED-Belieferung:

In jeder LED-Bestellung muß neben der bestellten "Einzelgruppe" die freigegebene "Reservegruppe" deutlich aufgeführt werden.

Sicherheitshinweise

OSRAM LEDs erreichen aufgrund von neuen Chip-Technologien immer höhere optische Leistungen. Wir empfehlen daher, schon bei der Entwicklung von Geräten, die zu diesem Zeitpunkt gültigen Normen IEC 825-1 bzw. EN 60825-1 zu beachten und insbesondere auf den Gebrauch von entsprechenden Schutzvorrichtungen in Ihren Labors hinzuweisen.

Betriebsbereich

Der empfohlene Betriebsbereich gibt die Betriebsbedingungen an, die nicht überschritten werden sollten, um eine Lebensdauer von $> 10^5$ Stunden zu erreichen.

NOTES

Parameters for OSRAM LED Luminous Intensity Group System for Radial LEDs

All LEDs are measured in luminous intensity groups $I_{Vmax} / I_{Vmin} \leq$ Factor 2 or maximum luminous intensity variation:

entire luminous intensity: $\pm 33\%$
half luminous intensity: $\pm 23\%$ (on request)

For luminous intensity groups and values see page 83 Type designation system.

1. No packing unit/tape ever contains more than one luminous intensity group!
Matching Factor of Brightness within one packaging Unit
 $I_{Vmin} : I_{Vmax}$ bzw. $\Phi_{Vmin} : \Phi_{Vmax} = 1 : 2$
2. The standard shipping format for serial types includes a lower or upper family group or 2 to 4 individual groups.
3. These 2 to 4 individual groups cover 60 to 80%, and the two family groups cover 100% of the overall luminous intensity.

Example of grouping scheme:

LS 3366 - NR lower family group
- P individual group
- Q individual group
- R individual group
- PS upper family group

Lower family group: Scope of delivery includes luminous intensity groups N, P, Q, R

Upper family group: Scope of delivery includes luminous intensity groups P, Q, R, S

Individual groups:

Luminosity variations caused by the technology used in current LED manufacturing processes over a protracted manufacturing period (semiconductor material - chip fabrication - assembly process) mean that it is not possible to assign LEDs to a single luminous intensity group.

For this reason at least two luminous intensity groups must be provided.

Owing to continuous improvements in our chip and LED manufacturing processes, LED luminous intensity values are set to increase. We will inform you in good time of any necessary changes to the luminous intensity groups.

If more than 2 individual groups are available, agreement should be reached with your Osram OS partner regarding the main distribution.

For especially critical applications there is the option of making a narrower selection (luminosity half groups / wavelength group). This multiplies the number of shipment groups.

Golden rule for ordering individual groups to ensure a continuous LED supply:

For any LED order please indicate clearly the released "reserve group" in addition to the "individual group" ordered.

Safety Instructions

The use of new chip technologies means that OSRAM LEDs are delivering higher and higher levels of optical performance. We therefore recommend that the current versions of the IEC 825-1 and EN 60825-1 standards are taken into account right from the outset, i.e. at the equipment development stage, and that suitable protection facilities are provided in your laboratories.

Operating Range

In order to achieve a medium life of $> 10^5$ hours, the conditions indicated by the recommended operating range should not be exceeded.

LUMINESZENZDIODEN

LIGHT EMITTING DIODES



RADIALE LED

RADIAL LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Gehäusefarbe Emission Color	at			2 ϕ (typ.) (50% I _V) [deg.]	Bestellnummer Ordering code	Fig.
					I _V [mcd]	Φ_V [mlm]	I _F [mA]			

3 mm LED

3 mm LED

	LH 3344-QT LH 3344-R LH 3344-S LH 3344-T LH 3344-RU	hyper-red	645	red clear	71.0 ... 450.0 112.0 ... 180.0 180.0 ... 280.0 280.0 ... 450.0 112.0 ... 710.0	80 (typ.) 40 (typ.) 70 (typ.) 110 (typ.) 130 (typ.)	10	25	Q62703-Q2231 Q62703-Q3198 Q62703-Q3199 Q62703-Q3817 Q62703-Q3200	24
	LS 3341-LP LS 3341-M LS 3341-N LS 3341-P LS 3341-MQ	super-red	628	red clear	11.20 ... 71.0 18.00 ... 28.0 28.00 ... 45.0 45.00 ... 71.0 18.00 ... 112.0	35 (typ.) 20 (typ.) 30 (typ.) 50 (typ.) 55 (typ.)	10	40	Q62703-Q3911 Q62703-Q2146 Q62703-Q2147 Q62703-Q3445 Q62703-Q2148	25
	LY 3341-LP LY 3341-M LY 3341-N LY 3341-P LY 3341-MQ	yellow	587	yellow clear	11.20 ... 71.0 18.00 ... 28.0 28.00 ... 45.0 45.00 ... 71.0 18.00 ... 112.0	35 (typ.) 20 (typ.) 30 (typ.) 50 (typ.) 55 (typ.)	10	40	Q62703-Q2152 Q62703-Q2151 Q62703-Q2398 Q62703-Q3234 Q62703-Q2149	
	LG 3341-KN LG 3341-M LG 3341-N LG 3341-MQ	green	570	green clear	7.10 ... 45.0 18.00 ... 28.0 28.00 ... 45.0 18.00 ... 112.0	25 (typ.) 20 (typ.) 30 (typ.) 60 (typ.)	10	40	Q62703-Q2153 Q62703-Q2155 Q62703-Q3187 Q62703-Q2156	
	LP 3341-JM LP 3341-K LP 3341-L LP 3341-M LP 3341-KN	pure green	560	green clear	4.50 ... 28.0 7.10 ... 11.2 11.20 ... 18.0 18.00 ... 28.0 7.10 ... 45.0	14 (typ.) 7 (typ.) 12 (typ.) 20 (typ.) 22 (typ.)	10	40	Q62703-Q3815 Q62703-Q3816 Q62703-Q2986 Q62703-Q2919 Q62703-Q2750	
LS 3340-KN LS 3340-L LS 3340-M LS 3340-N LS 3340-LP	super-red	628	red clear	7.10 ... 45.0 11.20 ... 18.0 18.00 ... 28.0 28.00 ... 45.0 11.20 ... 71.0	35 (typ.) 20 (typ.) 30 (typ.) 45 (typ.) 55 (typ.)	10	50	Q62703-Q1701 Q62703-Q1702 Q62703-Q1704 Q62703-Q2320 Q62703-Q3223		
	LO 3340-KN LO 3340-L LO 3340-M LO 3340-N LO 3340-LP	orange	606	orange clear	7.10 ... 45.0 11.20 ... 18.0 18.00 ... 28.0 28.00 ... 45.0 11.20 ... 71.0	35 (typ.) 20 (typ.) 30 (typ.) 45 (typ.) 55 (typ.)	10	50	Q62703-Q1886 Q62703-Q2256 Q62703-Q2255 Q62703-Q2473 Q62703-Q2628	26
	LY 3340-JM LY 3340-L LY 3340-M LY 3340-N LY 3340-LP	yellow	587	yellow clear	4.50 ... 28.0 11.20 ... 18.0 18.00 ... 28.0 28.00 ... 45.0 11.20 ... 71.0	20 (typ.) 20 (typ.) 30 (typ.) 45 (typ.) 55 (typ.)	10	50	Q62703-Q1789 Q62703-Q1791 Q62703-Q1999 Q62703-Q2652 Q62703-Q1792	
	LG 3330-KN LG 3330-M LG 3330-N LG 3330-LP	green	570	colorless clear	7.10 ... 45.0 18.00 ... 28.0 28.00 ... 45.0 11.20 ... 71.0	35 (typ.) 30 (typ.) 45 (typ.) 55 (typ.)	10	50	Q62703-Q1698 Q62703-Q1700 Q62703-Q2010 Q62703-Q2011	
	LP 3340-JL LP 3340-K LP 3340-L LP 3340-KM	pure green	560	green clear	4.50 ... 18.0 7.10 ... 11.2 11.20 ... 18.0 7.10 ... 28.0	10 (typ.) 9 (typ.) 14 (typ.) 17 (typ.)	10	50	Q62703-Q2749 Q62703-Q2982 Q62703-Q2980 Q62703-Q3211	
	LH 3364-LP LH 3364-M LH 3364-N LH 3364-MQ	hyper-red	645	red diffused	11.20 ... 71.0 18.00 ... 28.0 28.00 ... 45.0 18.00 ... 112.0	80 (typ.) 40 (typ.) 70 (typ.) 130 (typ.)	10	45	Q62703-Q3202 Q62703-Q3203 Q62703-Q2798 Q62703-Q3201	


RADIALE LED

RADIAL LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Gehäusefarbe Emission Color	at			2 ϕ (typ.) (50% I _V) [deg.]	Bestellnummer Ordering code	Fig.
					I _V [mcd]	Φ_V [mlm]	I _F [mA]			

3 mm LED (Forts.)


3 mm LED (cont'd)

	LR 3360-DG LR 3360-F LR 3360-G LR 3360-FJ	red	645	red diffused	0.45 ... 2.8 1.12 ... 1.8 1.80 ... 2.8 1.12 ... 7.1	6 (typ.) 5 (typ.) 8 (typ.) 14 (typ.)	10	70	Q62703-Q1316 Q62703-Q1317 Q62703-Q1318 Q62703-Q1319	27
	LS 3360-HL LS 3360-K LS 3360-L LS 3360-KN	super-red	628	red diffused	2.80 ... 18.0 7.10 ... 11.2 11.20 ... 18.0 7.10 ... 45.0	26 (typ.) 20 (typ.) 35 (typ.) 65 (typ.)	10	70	Q62703-Q1320 Q62703-Q1321 Q62703-Q1322 Q62703-Q1323	
	LO 3360-HL LO 3360-K LO 3360-L LO 3360-JM	orange	606	orange diffused	2.80 ... 18.0 7.10 ... 11.2 11.20 ... 18.0 4.50 ... 28.0	26 (typ.) 20 (typ.) 35 (typ.) 40 (typ.)	10	70	Q62703-Q1887 Q62703-Q2400 Q62703-Q2596 Q62703-Q2410	
	LY 3360-HL LY 3360-K LY 3360-L LY 3360-KN	yellow	587	yellow diffused	2.80 ... 18.0 7.10 ... 11.2 11.20 ... 18.0 7.10 ... 45.0	26 (typ.) 20 (typ.) 35 (typ.) 65 (typ.)	10	70	Q62703-Q1324 Q62703-Q1325 Q62703-Q1326 Q62703-Q1998	
	LG 3360-HL LG 3360-K LG 3360-L LG 3360-KN	green	570	green diffused	2.80 ... 18.0 7.10 ... 11.2 11.20 ... 18.0 7.10 ... 45.0	26 (typ.) 20 (typ.) 35 (typ.) 65 (typ.)	10	70	Q62703-Q3818 Q62703-Q2008 Q62703-Q3507 Q62703-Q3819	
	LP 3360-GK LP 3360-H LP 3360-J LP 3360-HL	pure green	560	green diffused	1.80 ... 11.2 2.80 ... 4.5 4.50 ... 7.1 2.80 ... 18.0	16 (typ.) 9 (typ.) 14 (typ.) 26 (typ.)	10	70	Q62703-Q2467 Q62703-Q2914 Q62703-Q2915 Q62703-Q3213	

Nicht für Neuentwicklungen / Not for new design

Hyper 3 mm LED

Hyper 3 mm LED

	LS 3336-QT LS 3336-R LS 3336-S LS 3336-T LS 3336-RU	super-red	633	colorless clear	71.0 ... 450.0 112.0 ... 180.0 180.0 ... 280.0 280.0 ... 450.0 112.0 ... 710.0	390 (typ.) 210 (typ.) 330 (typ.) 520 (typ.) 620 (typ.)	20	50	Q62703-Q3482 Q62703-Q3484 Q62703-Q3485 Q62703-Q3813 Q62703-Q3486	27
	LA 3336-RU LA 3336-S LA 3336-T LA 3336-U LA 3336-SV	amber	615	colorless clear	112.0 ... 710.0 180.0 ... 280.0 280.0 ... 450.0 450.0 ... 710.0 180.0 ... 1120.0	600 (typ.) 320 (typ.) 500 (typ.) 800 (typ.) 940 (typ.)	20	50	Q62703-Q3554 Q62703-Q3551 Q62703-Q3552 Q62703-Q3553 Q62703-Q3555	
	LO 3336-RU LO 3336-S LO 3336-T LO 3336-U LO 3336-SV	orange	606	colorless clear	112.0 ... 710.0 180.0 ... 280.0 280.0 ... 450.0 450.0 ... 710.0 180.0 ... 1120.0	600 (typ.) 320 (typ.) 500 (typ.) 800 (typ.) 940 (typ.)	20	50	Q62703-Q3144 Q62703-Q3176 Q62703-Q3170 Q62703-Q3307 Q62703-Q3177	
	LY 3336-RU LY 3336-S LY 3336-T LY 3336-U LY 3336-SV	yellow	587	colorless clear	112.0 ... 710.0 180.0 ... 280.0 280.0 ... 450.0 450.0 ... 710.0 180.0 ... 1120.0	600 (typ.) 320 (typ.) 500 (typ.) 800 (typ.) 940 (typ.)	20	50	Q62703-Q3487 Q62703-Q3489 Q62703-Q3490 Q62703-Q3814 Q62703-Q3491	
	LB 3336-MQ LB 3336-M LB 3336-N LB 3336-P	blue	465	colorless clear	18.0 ... 112.0 18.0 ... 28.0 28.0 ... 45.0 45.0 ... 71.0	25 (typ.) 15 (typ.) 23 (typ.) 36 (typ.)	10	50	Q62703-Q4068 Q62703-Q3902 Q62703-Q3903 Q62703-Q3904	

Nicht für Neuentwicklungen / Not for new design

LUMINESZENZDIODEN

LIGHT EMITTING DIODES






RADIALE LED

RADIAL LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Gehäusefarbe Emission Color	at			2 ϕ (typ.) (50% I _V) [deg].	Bestellnummer Ordering code	Fig.
					I _V [mcd]	Φ_V [mlm]	I _F [mA]			


Hyper 3 mm LED (Forts.)

Hyper 3 mm LED (cont'd)

	LS 3366-NR LS 3366-P LS 3366-Q LS 3366-R LS 3366-PS	super-red	633	red diffused	28.0 ... 180.0 45.0 ... 71.0 71.0 ... 112.0 112.0 ... 180.0 45.0 ... 280.0	360 (typ.) 190 (typ.) 300 (typ.) 480 (typ.) 580 (typ.)	20	70	Q62703-Q3457 Q62703-Q3458 Q62703-Q3459 Q62703-Q3460 Q62703-Q3461	27
	LA 3366-PS LA 3366-Q LA 3366-R LA 3366-S LA 3366-QT	amber	615	orange diffused	45.0 ... 280.0 71.0 ... 112.0 112.0 ... 180.0 180.0 ... 280.0 71.0 ... 450.0	540 (typ.) 280 (typ.) 450 (typ.) 720 (typ.) 840 (typ.)	20	70	Q62703-Q3881 Q62703-Q3882 Q62703-Q3883 Q62703-Q3884 Q62703-Q3885	
	LO 3366-PS LO 3366-Q LO 3366-R LO 3366-S LO 3366-QT	orange	606	orange diffused	45.0 ... 280.0 71.0 ... 112.0 112.0 ... 180.0 180.0 ... 280.0 71.0 ... 450.0	540 (typ.) 280 (typ.) 450 (typ.) 720 (typ.) 840 (typ.)	20	70	Q62703-Q3127 Q62703-Q3172 Q62703-Q3173 Q62703-Q3174 Q62703-Q3175	
	LY 3366-PS LY 3366-Q LY 3366-R LY 3366-S LY 3366-QT	yellow	587	yellow diffused	45.0 ... 280.0 71.0 ... 112.0 112.0 ... 180.0 180.0 ... 280.0 71.0 ... 450.0	540 (typ.) 280 (typ.) 450 (typ.) 720 (typ.) 840 (typ.)	20	70	Q62703-Q3462 Q62703-Q3464 Q62703-Q3465 Q62703-Q3463 Q62703-Q3466	
	LB 3356-JM LB 3356-K LB 3356-L LB 3356-M	blue	465	colorless diffused	4.5 ... 28.0 7.1 ... 11.2 11.2 ... 18.0 18.0 ... 28.0	45 (typ.) 30 (typ.) 45 (typ.) 65 (typ.)	10	70	Q62703-Q4192 Q62703-Q4336 Q62703-Q4721 Q62703-Q4722	
	LB 3333-PT	blue	470	colorless clear	45.0 ... 450.0	210 (typ.)	20	30	Q62703-Q4841	27
	LV 3333-SAW	verde	505	colorless clear	180.0 ... 1800.0	840 (typ.)	20	30	Q62703-Q4916	
	LT 3333-SAW	true green	528	colorless clear	180.0 ... 1800.0	840 (typ.)	20	30	Q62703-Q4855	
	LW 3333-S2T2-1 LW 3333-T2V1-1	white	x=0.32 y=0.31	colorless clear	224.0 ... 450.0 355.0 ... 900.0	390 (typ.) 630 (typ.)	20	40	Q62703-Q5704 Q62703-Q5705	

3 mm LED

3 mm LED

	LS 3380-GK LS 3380-H LS 3380-J LS 3380-K LS 3380-HL	super-red	628	red diffused	1.8 ... 11.2 2.8 ... 4.5 4.5 ... 7.1 7.1 ... 11.2 2.8 ... 18.0	35 (typ.) 20 (typ.) 30 (typ.) 50 (typ.) 60 (typ.)	10	100	Q62703-Q2629 Q62703-Q1726 Q62703-Q1349 Q62703-Q3824 Q62703-Q2630	27
	LY 3380-GK LY 3380-H LY 3380-J LY 3380-K LY 3380-HL	yellow	587	yellow diffused	1.8 ... 11.2 2.8 ... 4.5 4.5 ... 7.1 7.1 ... 11.2 2.8 ... 18.0	35 (typ.) 20 (typ.) 30 (typ.) 50 (typ.) 60 (typ.)	10	100	Q62703-Q1352 Q62703-Q1353 Q62703-Q1354 Q62703-Q2317 Q62703-Q1355	
	LG 3380-GK LG 3380-J LG 3380-K LG 3380-JL	green	570	green diffused	1.8 ... 11.2 4.5 ... 7.1 7.1 ... 11.2 4.5 ... 18.0	45 (typ.) 20 (typ.) 30 (typ.) 40 (typ.)	10	100	Q62703-Q1356 Q62703-Q2318 Q62703-Q2631 Q62703-Q3910	

LUMINESZENZDIODEN

LIGHT EMITTING DIODES


RADIALE LED

RADIAL LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Gehäusefarbe Emission Color	at			2 ϕ (typ.) (50% I_V) [deg.]	Bestellnummer Ordering code	Fig.
					I_V [mcd]	Φ_V [mlm]	I_F [mA]			


Hyper 3 mm LED

Hyper 3 mm LED

	LS 3386-LP LS 3386-M LS 3386-N LS 3386-P LS 3386-MQ	super-red	633	red diffused	11.2 ... 71.0 18.0 ... 28.0 28.0 ... 45.0 45.0 ... 71.0 18.0 ... 112.0	360 (typ.) 190 (typ.) 300 (typ.) 480 (typ.) 560 (typ.)	20	100	Q62703-Q3579 Q62703-Q3581 Q62703-Q3582 Q62703-Q3709 Q62703-Q3580	27
	LA 3386-MQ LA 3386-N LA 3386-P LA 3386-Q LA 3386-NR	amber	615	orange diffused	18.0 ... 112.0 28.0 ... 45.0 45.0 ... 71.0 71.0 ... 112.0 28.0 ... 180.0	530 (typ.) 280 (typ.) 450 (typ.) 700 (typ.) 840 (typ.)	20	100	Q62703-Q3886 Q62703-Q3887 Q62703-Q3888 Q62703-Q3889 Q62703-Q3890	
	LO 3386-MQ LO 3386-N LO 3386-P LO 3386-Q LO 3386-NR	orange	606	orange diffused	18.0 ... 112.0 28.0 ... 45.0 45.0 ... 71.0 71.0 ... 112.0 28.0 ... 180.0	530 (typ.) 280 (typ.) 450 (typ.) 700 (typ.) 840 (typ.)	20	100	Q62703-Q3891 Q62703-Q3892 Q62703-Q3893 Q62703-Q3894 Q62703-Q3895	
	LY 3386-MQ LY 3386-N LY 3386-P LY 3386-Q LY 3386-NR	yellow	587	yellow diffused	18.0 ... 112.0 28.0 ... 45.0 45.0 ... 71.0 71.0 ... 112.0 28.0 ... 180.0	530 (typ.) 280 (typ.) 450 (typ.) 700 (typ.) 840 (typ.)	20	100	Q62703-Q3896 Q62703-Q3897 Q62703-Q3898 Q62703-Q3899 Q62703-Q3900	

LC (Niedrigstrom) 3 mm LED

LC (Low Current) 3 mm LED

	LS 3369-EH LS 3369-G LS 3369-H LS 3369-GK	super-red	628	red diffused	0.71 ... 4.5 1.80 ... 2.8 2.80 ... 4.5 1.80 ... 11.2	— — — —	2	60	Q62703-Q1748 Q62703-Q2068 Q62703-Q3820 Q62703-Q3821	27
	LY 3369-EH LY 3369-F LY 3369-G LY 3369-H LY 3369-FJ	yellow	587	yellow diffused	0.71 ... 4.5 1.12 ... 1.8 1.80 ... 2.8 2.80 ... 4.5 1.12 ... 7.1	— — — — —	2	60	Q62703-Q1749 Q62703-Q2030 Q62703-Q2029 Q62703-Q1906 Q62703-Q3822	
	LG 3369-EH LG 3369-F LG 3369-G LG 3369-FJ	green	570	green diffused	0.71 ... 4.5 1.12 ... 1.8 1.80 ... 2.8 1.12 ... 7.1	— — — —	2	60	Q62703-Q1750 Q62703-Q2069 Q62703-Q2070 Q62703-Q3823	

LUMINESZENZDIODEN

LIGHT EMITTING DIODES



RADIALE LED

RADIAL LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Gehäusefarbe Emission Color				2 ϕ (typ.) (50% I _V) [deg].	Bestellnummer Ordering code	Fig.
					I _V [mcd]	Φ_V [mlm]	at I _F [mA]			

5 mm LED

5 mm LED

	LH 5424-QT LH 5424-S LH 5424-T LH 5424-SU	hyper-red	645	red clear	71 ... 450 180 ... 280 280 ... 450 180 ... 710	60 (typ.) 50 (typ.) 80 (typ.) 100 (typ.)	10	16	Q62703-Q2242 Q62703-Q3826 Q62703-Q3827 Q62703-Q3828	29
	LS 5421-NR LS 5421-Q LS 5421-R LS 5421-S LS 5421-QT	super-red	628	red clear	28 ... 180 71 ... 112 112 ... 180 180 ... 280 71 ... 450	20 (typ.) 20 (typ.) 30 (typ.) 50 (typ.) 60 (typ.)	10	20	Q62703-Q1994 Q62703-Q1442 Q62703-Q1738 Q62703-Q2405 Q62703-Q1995	
	LO 5411-QT LO 5411-R LO 5411-S LO 5411-T LO 5411-RU	orange	606	colorless clear	71 ... 450 112 ... 180 180 ... 280 280 ... 450 112 ... 710	40 (typ.) 20 (typ.) 30 (typ.) 50 (typ.) 60 (typ.)	10	20	Q62703-Q3928 Q62703-Q3929 Q62703-Q3930 Q62703-Q3931 Q62703-Q3932	
	LY 5421-NR LY 5421-Q LY 5421-R LY 5421-S LY 5421-QT	yellow	587	yellow clear	28 ... 180 71 ... 112 112 ... 180 180 ... 280 71 ... 450	20 (typ.) 20 (typ.) 30 (typ.) 50 (typ.) 60 (typ.)	10	20	Q62703-Q1444 Q62703-Q1446 Q62703-Q2005 Q62703-Q2632 Q62703-Q1447	
	LG 5411-NR LG 5411-Q LG 5411-R LG 5411-S LG 5411-QT	green	570	colorless clear	28 ... 180 71 ... 112 112 ... 180 180 ... 280 71 ... 450	20 (typ.) 20 (typ.) 30 (typ.) 50 (typ.) 60 (typ.)	10	20	Q62703-Q2023 Q62703-Q1739 Q62703-Q1451 Q62703-Q2321 Q62703-Q2024	30
	LS 5420-MQ LS 5420-P LS 5420-Q LS 5420-R LS 5420-PT	super-red	628	red clear	18 ... 112 45 ... 71 71 ... 112 112 ... 180 45 ... 450	20 (typ.) 20 (typ.) 30 (typ.) 50 (typ.) 90 (typ.)	10	24	Q62703-Q1428 Q62703-Q1430 Q62703-Q1993 Q62703-Q1429 Q62703-Q1431	
	LY 5420-MQ LY 5420-P LY 5420-Q LY 5420-R LY 5420-PS	yellow	587	yellow clear	18 ... 112 45 ... 71 71 ... 112 112 ... 180 45 ... 280	20 (typ.) 20 (typ.) 30 (typ.) 50 (typ.) 60 (typ.)	10	24	Q62703-Q1432 Q62703-Q1434 Q62703-Q2004 Q62703-Q3235 Q62703-Q1435	
	LG 5410-MQ LG 5410-P LG 5410-Q LG 5410-R LG 5410-PS	green	570	colorless clear	18 ... 112 45 ... 71 71 ... 112 112 ... 180 45 ... 280	20 (typ.) 20 (typ.) 30 (typ.) 50 (typ.) 60 (typ.)	10	24	Q62703-Q1439 Q62703-Q1868 Q62703-Q2020 Q62703-Q2021 Q62703-Q2022	

■ Nicht für Neuentwicklungen / Not for new design

LUMINESZENZDIODEN

LIGHT EMITTING DIODES








RADIALE LED

RADIAL LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Gehäusefarbe Emission Color	at			2 ϕ (typ.) (50% I _V) [deg.]	Bestellnummer Ordering code	Fig.
					I _V [mcd]	Φ_V [mlm]	I _F [mA]			

Hyper 5 mm LED

Hyper 5 mm LED

	LY 5466-PR LY 5466-Q LY 5466-R LY 5466-QS	yellow	587	colored diffused	45 ... 180 71 ... 112 112 ... 180 71 ... 280	340 (typ.) 270 (typ.) 430 (typ.) 530 (typ.)	20	100	Q62703-Q3608 Q62703-Q3610 Q62703-Q3611 Q62703-Q3609
	LY 5415-AWCW-1 LY 5415-CWEW-1	yellow	587	colorless clear	1120 ... 4500 2800 ... 11200	560 (typ.) 1120 (typ.)	20	15	Q62703-Q6258 Q62703-Q6255
	LA 541B-BWDW-1 LA 541B-DWEW-1	amber	617	colorless clear	1800 ... 7100 4500 ... 11200	700 (typ.) 1200 (typ.)	20	15	Q62703-Q6257 Q62703-Q6256
	LO 541B-BWDW-1 LO 541B-DWEW-1	orange	606	colorless clear	1800 ... 7100 4500 ... 11200	700 (typ.) 1200 (typ.)	20	15	Q62703-Q6296 Q62703-Q6297
	LW 541C-AWBW-1 LW 541C-BWCW-1	white	x=0.32 y=0.31	colorless clear	1120 ... 2800 1800 ... 4500	590 (typ.) 950 (typ.)	20	20	Q62703-Q6400 Q62703-Q6401
	LB 5416-PS	blue	465	colorless clear	45 ... 280	45 (typ.)	10	14	Q62703-Q4256
	LS 5436-SV	super-red	633	colorless clear	180 ... 1120	–	20	40	Q62703-Q3626
	LA 5436-TAW	amber	615	colorless clear	280 ... 1800	–	20	40	Q62703-Q3919
	LO 5436-TAW	orange	606	colorless clear	280 ... 1800	–	20	40	Q62703-Q3628
	LY 5436-TAW	yellow	587	colorless clear	280 ... 1800	–	20	40	Q62703-Q3630
	LB 5436-NQ	blue	465	colorless clear	28 ... 112	35 (typ.)	10	35	Q62703-Q4028
	LB 5413-TV LB 5413-VBW	blue	470	colorless clear	280 ... 1120 710 ... 2800	120 (typ.) 300 (typ.)	20	15	Q62703-Q5930 Q62703-Q5931
	LV 5413-VBW LV 5413-BWDW	verde	505	colorless clear	710 ... 2800 1800 ... 7100	470 (typ.) 1200 (typ.)	20	15	Q62703-Q5932 Q62703-Q5933
	LT 5413-VBW LT 5413-BWDW	true green	528	colorless clear	710 ... 2800 1800 ... 7100	470 (typ.) 1200 (typ.)	20	15	Q62703-Q5934 Q62703-Q5935
	LB 5433-QU	blue	470	colorless clear	71 ... 710	210 (typ.)	20	40	Q62703-Q4843
	LV 5433-TBW	verde	505	colorless clear	280 ... 2800	750 (typ.)	20	40	Q62703-Q4850
	LT 5433-TBW	true green	528	colorless clear	280 ... 1120	750 (typ.)	20	40	Q62703-Q4857
	LB 5456-JL	blue	465	colorless diffused	4.5 ... 18.0	35 (typ.)	10	50	Q62703-Q4244


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LIGHT EMITTING DIODES

RADIALE LED

RADIAL LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Gehäusefarbe Emission Color	at			2 ϕ (typ.) (50% I _V) [deg].	Bestellnummer Ordering code	Fig.	
					I _V [mcd]	Φ_V [mlm]	I _F [mA]				
5 mm LED											
	LR 5360-DG LR 5360-F LR 5360-G LR 5360-FJ	red	645	red diffused	0.45 ... 2.80 1.12 ... 1.80 1.80 ... 2.80 1.12 ... 7.10	4 (typ.) 3 (typ.) 5 (typ.) 6 (typ.)	10	50	Q62703-Q1376 Q62703-Q1377 Q62703-Q1378 Q62703-Q1379	31	
	LS 5360-HL LS 5360-J LS 5360-K LS 5360-L LS 5360-JM	super-red	628	red diffused	2.80 ... 18.00 4.50 ... 7.10 7.10 ... 11.20 11.20 ... 18.00 4.50 ... 28.00	35 (typ.) 20 (typ.) 30 (typ.) 50 (typ.) 60 (typ.)	10	50	Q62703-Q1380 Q62703-Q1744 Q62703-Q1381 Q62703-Q1382 Q62703-Q3224		
	LY 5360-HL LY 5360-J LY 5360-K LY 5360-L LY 5360-JM	yellow	587	yellow diffused	2.80 ... 18.00 4.50 ... 7.10 7.10 ... 11.20 11.20 ... 18.00 4.50 ... 28.00	35 (typ.) 20 (typ.) 30 (typ.) 50 (typ.) 60 (typ.)	10	50	Q62703-Q2000 Q62703-Q1386 Q62703-Q2001 Q62702-Q2404 Q62703-Q1387		
	LG 5360-GK LG 5360-H LG 5360-J LG 5360-K LG 5360-HL	green	570	green diffused	1.80 ... 11.20 2.80 ... 4.50 4.50 ... 7.10 7.10 ... 11.20 2.80 ... 18.00	20 (typ.) 12 (typ.) 20 (typ.) 30 (typ.) 50 (typ.)	10	50	Q62703-Q1391 Q62703-Q1390 Q62703-Q1866 Q62703-Q2012 Q62703-Q3188		
	LH 5464-MQ LH 5464-N LH 5464-P LH 5464-Q LH 5464-NR	hyper-red	645	red diffused	18.00 ... 112.00 28.00 ... 45.00 45.00 ... 71.00 71.00 ... 112.00 28.00 ... 180.00	55 (typ.) 30 (typ.) 50 (typ.) 80 (typ.) 90 (typ.)	10	35	Q62703-Q3829 Q62703-Q3830 Q62703-Q2753 Q62703-Q3831 Q62703-Q3832		29
	LR 5460-DG LR 5460-F LR 5460-G LR 5460-FJ	red	645	red diffused	0.45 ... 2.80 1.12 ... 1.80 1.80 ... 2.80 1.12 ... 7.10	4 (typ.) 3 (typ.) 5 (typ.) 6 (typ.)	10	50	Q62703-Q1392 Q62703-Q1393 Q62703-Q1394 Q62703-Q1395		30
	LS 5460-HL LS 5460-J LS 5460-K LS 5460-L LS 5460-JM	super-red	628	red diffused	2.80 ... 18.00 4.50 ... 7.10 7.10 ... 11.20 11.20 ... 18.00 4.50 ... 28.00	35 (typ.) 20 (typ.) 30 (typ.) 50 (typ.) 60 (typ.)	10	50	Q62703-Q1396 Q62703-Q1746 Q62703-Q1397 Q62703-Q1398 Q62703-Q3225		
	LY 5460-HL LY 5460-J LY 5460-K LY 5460-L LY 5460-JM	yellow	587	yellow diffused	2.80 ... 18.00 4.50 ... 7.10 7.10 ... 11.20 11.20 ... 18.00 4.50 ... 28.00	35 (typ.) 20 (typ.) 30 (typ.) 50 (typ.) 60 (typ.)	10	50	Q62703-Q1400 Q62703-Q1401 Q62703-Q1402 Q62703-Q2403 Q62703-Q1403		
	LG 5460-GK LG 5460-J LG 5460-K LG 5460-HL	green	570	green diffused	1.80 ... 11.20 4.50 ... 7.10 7.10 ... 11.20 2.80 ... 18.00	20 (typ.) 20 (typ.) 30 (typ.) 50 (typ.)	10	50	Q62703-Q1407 Q62703-Q1867 Q62703-Q2014 Q62703-Q3190		
	LR 5480-CF LR 5480-E LR 5480-F LR 5480-DG	red	645	red diffused	0.28 ... 1.80 0.71 ... 1.12 1.12 ... 1.80 0.45 ... 2.80	4 (typ.) 3 (typ.) 5 (typ.) 6 (typ.)	10	80	Q62703-Q1986 Q62703-Q1734 Q62703-Q1987 Q62703-Q1408		
	LS 5480-GL LS 5480-J LS 5480-K LS 5480-L LS 5480-JM	super-red	628	red diffused	1.80 ... 18.00 4.50 ... 7.10 7.10 ... 11.20 11.20 ... 18.00 4.50 ... 28.00	35 (typ.) 20 (typ.) 30 (typ.) 50 (typ.) 60 (typ.)	10	80	Q62703-Q1989 Q62703-Q1414 Q62703-Q1990 Q62703-Q1991 Q62703-Q1992		
	LY 5480-HL LY 5480-K LY 5480-L LY 5480-JM	yellow	587	yellow diffused	2.80 ... 18.00 7.10 ... 11.20 11.20 ... 18.00 4.50 ... 28.00	35 (typ.) 30 (typ.) 50 (typ.) 60 (typ.)	10	80	Q62703-Q1416 Q62703-Q1418 Q62703-Q2402 Q62703-Q1419		
	LG 5480-GK LG 5480-H LG 5480-J LG 5480-K LG 5480-HL	green	570	green diffused	1.80 ... 11.20 2.80 ... 4.50 4.50 ... 7.10 7.10 ... 11.20 2.80 ... 18.00	20 (typ.) 12 (typ.) 20 (typ.) 30 (typ.) 50 (typ.)	10	80	Q62703-Q1423 Q62703-Q1422 Q62703-Q1869 Q62703-Q2018 Q62703-Q3191		

Nicht Für Neuentwicklungen / Not For New Design

LUMINESZENZDIODEN

LIGHT EMITTING DIODES


RADIALE LED

RADIAL LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Gehäusefarbe Emission Color	at I_F [mA]			2 ϕ (typ.) (50% I_V) [deg.]	Bestellnummer Ordering code	Fig.
					I_V [mcd]	Φ_V [mlm]				


5 mm Led (Forts.)

5 mm Led (cont'd)

	LS 5380-FJ LS 5380-G LS 5380-H LS 5380-J LS 5380-HL	super-red	628	red diffused	1.12 ... 7.1 1.80 ... 2.8 2.80 ... 4.5 4.50 ... 7.1 2.80 ... 18.0	22 (typ.) 12 (typ.) 20 (typ.) 30 (typ.) 55 (typ.)	10	140	Q62703-Q1452 Q62703-Q1740 Q62703-Q1453 Q62703-Q1454 Q62703-Q1455	32
	LY 5380-GK LY 5380-H LY 5380-J LY 5380-HL	yellow	587	yellow diffused	1.80 ... 11.20 2.80 ... 4.50 4.50 ... 7.10 2.80 ... 18.00	35 (typ.) 18 (typ.) 30 (typ.) 55 (typ.)	10	140	Q62703-Q2002 Q62703-Q1457 Q62703-Q2319 Q62703-Q2003	
	LG 5380-GK LG 5380-H LG 5380-J LG 5380-K LG 5380-HL	green	570	green diffused	1.80 ... 11.20 2.80 ... 4.50 4.50 ... 7.10 7.10 ... 11.20 2.80 ... 18.00	35 (typ.) 18 (typ.) 30 (typ.) 45 (typ.) 55 (typ.)	10	140	Q62703-Q1463 Q62703-Q2032 Q62703-Q2016 Q62703-Q3189 Q62703-Q3825	


Lc 5 mm Led (Niedrigstrom)

Lc 5 mm Led (Low Current)

	LS 5469-EH LS 5469-G LS 5469-H LS 5469-GK	super-red	628	red diffused	0.71 ... 4.5 1.80 ... 2.8 2.80 ... 4.5 1.80 ... 11.2	7.8 (typ.) 6.9 (typ.) 11.0 (typ.) 19.5 (typ.)	2	50	Q62703-Q1751 Q62703-Q2344 Q62703-Q2345 Q62703-Q3833	30
	LY 5469-EH LY 5469-F LY 5469-G LY 5469-H LY 5469-FJ	yellow	587	yellow diffused	0.71 ... 4.5 1.12 ... 1.8 1.80 ... 2.8 2.80 ... 4.5 1.12 ... 7.1	7.8 (typ.) 4.4 (typ.) 6.9 (typ.) 11.0 (typ.) 12.3 (typ.)	2	50	Q62703-Q1752 Q62703-Q3834 Q62703-Q3835 Q62703-Q3836 Q62703-Q3837	
	LG 5469-EH LG 5469-F LG 5469-G LG 5469-FJ	green	570	green diffused	0.71 ... 4.5 1.12 ... 1.8 1.80 ... 2.8 1.12 ... 7.1	7.8 (typ.) 4.4 (typ.) 6.9 (typ.) 12.3 (typ.)	2	50	Q62703-Q1753 Q62703-Q3856 Q62703-Q3857 Q62703-Q3858	

5 mm MULTILED (2.54 mm Raster)

5 mm MULTILED (2.54 mm Spacing)

	LU 5351-GL	super-red/ green	628/ 570	colorless diffused	1.8 ... 18.0	–	10	50	Q62703-Q2046	36
	LU 5351-JM	super-red/ green	628/ 570	colorless diffused	4.5 ... 28.0	–	10	50	Q62703-Q2047	

■ Nicht Für Neuentwicklungen / Not For New Design

LUMINESZENZDIODEN

LIGHT EMITTING DIODES


RADIALE LED

RADIAL LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Gehäusefarbe Emission Color	at			2 ϕ (typ.) (50% I _V) [deg].	Bestellnummer Ordering code	Fig.
					I _V [mcd]	Φ_V [mlm]	I _F [mA]			


ARGUS® LED

ARGUS® LED

	LS K380-LP LS K380-N LS K380-P LS K380-Q LS K380-NR	super-red	628	red clear	– – – – –	11.2 ... 71.0 28.0 ... 45.0 45.0 ... 71.0 71.0 ... 112.0 28.0 ... 180.0	15	– – – – –	Q62703-Q1768 Q62703-Q0760 Q62703-Q1003 Q62703-Q1004 Q62703-Q2223	33
	LO K380-LP LO K380-N LO K380-P LO K380-Q LO K380-NR	orange	606	orange clear	– – – – –	11.2 ... 71.0 28.0 ... 45.0 45.0 ... 71.0 71.0 ... 112.0 28.0 ... 180.0	15	– – – – –	Q62703-Q1888 Q62703-Q2227 Q62703-Q2228 Q62703-Q2229 Q62703-Q2201	
	LY K380-LP LY K380-N LY K380-P LY K380-Q LY K380-NR	yellow	587	yellow clear	– – – – –	11.2 ... 71.0 28.0 ... 45.0 45.0 ... 71.0 71.0 ... 112.0 28.0 ... 180.0	15	– – – – –	Q62703-Q1769 Q62703-Q0575 Q62703-Q0576 Q62703-Q3844 Q62703-Q2224	
	LG K380-LP LG K380-N LG K380-P LG K380-Q LG K380-NR	green	570	green clear	– – – – –	11.2 ... 71.0 28.0 ... 45.0 45.0 ... 71.0 71.0 ... 112.0 28.0 ... 180.0	15	– – – – –	Q62703-Q1770 Q62703-Q0759 Q62703-Q1034 Q62703-Q3193 Q62703-Q2225	
	LP K380-KN LP K380-L LP K380-M LP K380-N LP K380-LP	pure green	560	colorless clear	– – – – –	7.1 ... 45.0 11.2 ... 18.0 18.0 ... 28.0 28.0 ... 45.0 11.2 ... 71.0	15	– – – – –	Q62703-Q2506 Q62703-Q3215 Q62703-Q2610 Q62703-Q2605 Q62703-Q3217	

Super ARGUS® LED


Super ARGUS® LED

	LG K382-QT LG K382-R LG K382-S LG K382-T LG K382-RU	green	570	green clear	– – – – –	71 ... 450 112 ... 180 180 ... 280 280 ... 450 112 ... 710	50	– – – – –	Q62703-Q2642 Q62703-Q2643 Q62703-Q2644 Q62703-Q2645 Q62703-Q1959	33
	LP K382-NR LP K382-P LP K382-Q LP K382-R LP K382-PS	pure green	560	colorless clear	– – – – –	28 ... 180 45 ... 71 71 ... 112 112 ... 180 45 ... 280	50	– – – – –	Q62703-Q2646 Q62703-Q2339 Q62703-Q2338 Q62703-Q2337 Q62703-Q2123	

■ Nicht Für Neuentwicklungen / Not For New Design

LC ARGUS® LED (Niedrigstrom)

LC ARGUS® LED (Low Current)

	LS K389-FO	super-red	628	red clear	–	≥ 1.12 (5.0 typ.)	2	–	Q62703-Q1771	33
	LY K389-FO	yellow	587	yellow clear	–	≥ 1.12 (5.0 typ.)	2	–	Q62703-Q1772	
	LG K389-FO	green	570	green clear	–	≥ 1.12 (5.0 typ.)	2	–	Q62703-Q1773	

■ Nicht Für Neuentwicklungen / Not For New Design

LUMINESZENZDIODEN

LIGHT EMITTING DIODES


RADIALE LED

RADIAL LED

Package	Type	Emissionsfarbe Emission color	λ_{dom} (typ.) [nm]	Gehäusefarbe Emission Color	at			2 ϕ (typ.) (50% I _V) [deg.]	Bestellnummer Ordering code	Fig.
					I _V [mcd]	Φ_V [mlm]	I _F [mA]			

Hyper ARGUS® 3 mm LED


Hyper ARGUS® 3 mm LED

	LH K376-QS	hyper-red	645	colorless clear	–	71.0 ... 280.0	20	–	Q62703-Q3492	33
	LH K376-R				–	112.0 ... 180.0				
	LH K376-S				–	180.0 ... 280.0				
	LH K376-RT				–	112.0 ... 450.0				
	LS K376-QT	super-red	633	colorless clear	–	71.0 ... 450.0	20	–	Q62703-Q3467	
	LS K376-R				–	112.0 ... 180.0				
	LS K376-S				–	180.0 ... 280.0				
	LS K376-T				–	280.0 ... 450.0				
	LS K376-RU				–	112.0 ... 710.0				
	LA K376-RU	amber	615	colorless clear	–	112.0 ... 710.0	20	–	Q62703-Q3735	
	LA K376-S				–	180.0 ... 280.0				
	LA K376-T				–	280.0 ... 450.0				
	LA K376-U				–	450.0 ... 710.0				
	LA K376-SV				–	180.0 ... 1120.0				
	LO K376-RU	orange	606	colorless clear	–	112.0 ... 710.0	20	–	Q62703-Q3472	
	LO K376-S				–	180.0 ... 280.0				
	LO K376-T				–	280.0 ... 450.0				
	LO K376-U				–	450.0 ... 710.0				
	LO K376-SV				–	180.0 ... 1120.0				
	LY K376-RU	yellow	587	colorless clear	–	112.0 ... 710.0	20	–	Q62703-Q3477	
	LY K376-S				–	180.0 ... 280.0				
	LY K376-T				–	280.0 ... 450.0				
	LY K376-U				–	450.0 ... 710.0				
	LY K376-SV				–	180.0 ... 1120.0				
LB K376-LP	blue	465	colorless clear	–	11.2 ... 71.0	10	–	Q62703-Q3796		

■ Nicht für Neuentwicklungen / Not for new design

Zeilen LED 2 mm \varnothing


Array LED 2 mm Dia

	LR Z181-CO	red	645	red diffused	≥ 0.25	–	10	100	Q62703-Q1495	34
	LR Z182-CO								Q62703-Q1496	
	LR Z183-CO								Q62703-Q1497	
	LR Z184-CO								Q62703-Q1498	
	LR Z185-CO								Q62703-Q1499	
	LR Z186-CO								Q62703-Q1500	
	LR Z187-CO								Q62703-Q1501	
	LR Z188-CO	Q62703-Q1502								
	LY Z181-CO	yellow	587	yellow diffused	≥ 0.25	–	10	100	Q62703-Q1505	
	LG Z181-CO	green	570	green diffused	≥ 0.25	–	10	100	Q62703-Q1506	
	LG Z182-CO								Q62703-Q1507	
	LG Z183-CO								Q62703-Q1508	
LG Z184-CO	Q62703-Q1509									
LG Z185-CO	Q62703-Q1510									
LG Z186-CO	Q62703-Q1511									
LG Z188-CO	Q62703-Q1513									

■ Nicht für Neuentwicklungen / Not for new design

Mini LED 1 mm \varnothing

Miniature LED 1 mm Dia

	LS U260-EH	super-red	628	red diffused	0.71 ... 4.50	–	10	60	Q62703-Q1492	35
	LY U260-EH	yellow	587	yellow diffused	0.71 ... 4.50	–	10	60	Q62703-Q1493	
	LG U260-EH	green	570	colorless diffused	0.71 ... 4.50	–	10	60	Q62703-Q1494	

■ Nicht für Neuentwicklungen / Not for new design

LUMINESZENZDIODEN

LIGHT EMITTING DIODES

Lötbedingungen für LED

Beim Einlöten ist darauf zu achten, daß das Bauelement thermisch nicht überlastet wird. Die maximale Sperrschichttemperatur darf nur kurzzeitig (max. 1 min) überschritten werden.

Zulässige Lötverfahren und Vorbehandlung siehe Tabelle:

Soldering conditions for LEDs

When soldering the component into position, make sure that it is not thermally overloaded. The maximum junction temperature may only be exceeded briefly (for no more than 1 min.).

Permissible soldering methods and preconditioning are:

Package	IR Reflow Soldering	TTW Soldering ¹⁾	Preconditioning acc. to Jedec Level
5mm (T1 3/4) LED	—	X	n.a.
3mm (T1) LED	—	X	n.a.
Mini SIDELED	X	—	2
Mini TOPLED	X	X ²⁾	2
TOPLED	X	X	2
SIDELED	X	X	2
Multi TOPLED	X	X	2
Multi SIDELED	X	—	2
CHIPLED	X	—	2
Power TOPLED	X	X	2
SMT Radial	X	—	3
ARGUS®	—	X	n.a.
SOT-23 LED	X	—	1
SmartLED	X	—	—
Micro SIDELED	X	X	2

1) ausgenommen reverse gullwing Gehäuse
except reverse gullwing packages

2) gilt nur für Hyper Mini TOPLED
only Hyper Mini TOPLED

Lösungsmittel zum Reinigen von eingelöteten LED

Zum Reinigen der eingelöteten LED sind organische Lösungsmittel geeignet, die aus Alkoholen oder bestimmten Fluorkohlenwasserstoffen oder aus einer Mischung von beiden Gruppen bestehen. Keinesfalls sollte man Lösungsmittel oder Lösungsmittelgemische verwenden, die chlorierte Kohlenwasserstoffe oder Ketone enthalten. Lösungsmittel dieser Art können den Verguß angreifen oder anlösen.

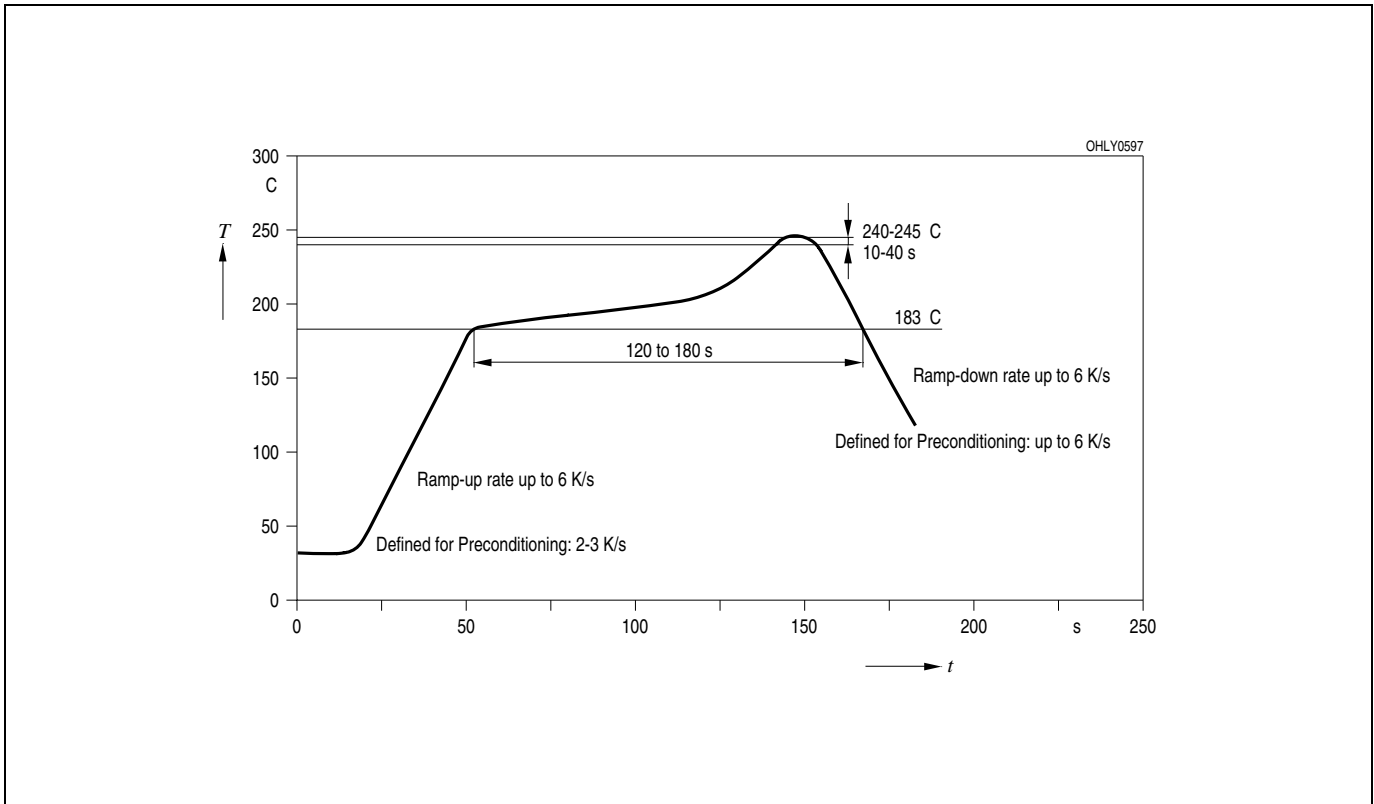
Lötpaddingdesignvorschläge finden Sie in den Datenblättern unter www.osram-os.com

Cleaning solvents for soldered-in LEDs

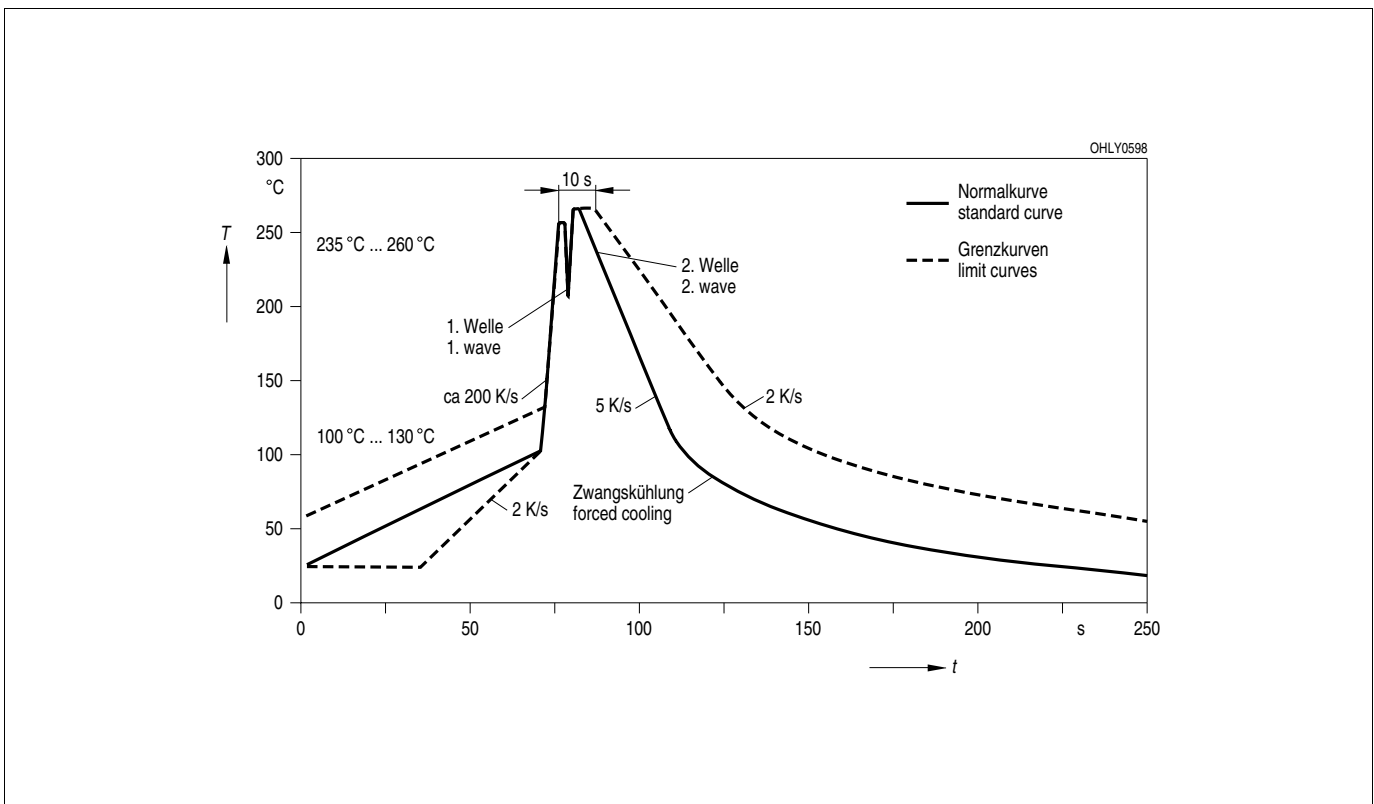
Organic solvents consisting of alcohols or hydrocarbon-fluorides or a mixture of both groups are suitable for cleaning soldered-in LEDs. In no way should solvents or solvent mixtures be used which contain chlorinated hydrocarbons or ketones. This type of solvents may attack or corrode the display housing or casing.

Recommended solder pads you can find in the related datasheet on www.osram-os.com

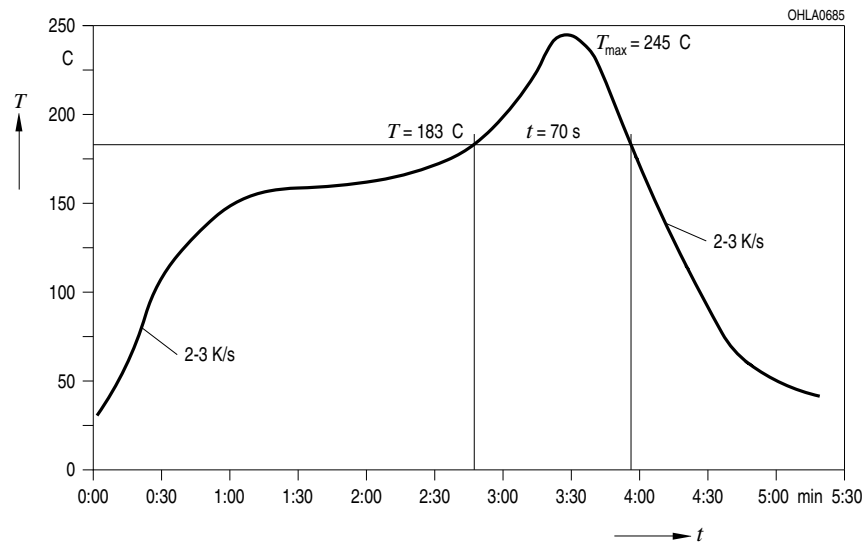
IR-reflow-soldering-profile acc. to IPC 9501 (except CHIPLEAD)



Wave soldering (dual wave) soldering profile acc. to CECC 00802



IR-reflow-soldering-profile acc. to IPC 9501 for CHIPLED package



Grenzwerte

Absolute maximum ratings

		Betriebstemperatur/ Operating temperature	Lagertemperatur/ Storage temperature	Sperrschichttemperatur/ Junction temperature	Stoßstrom Surge current ($T_A = 25\text{ °C}/t_p < 10\ \mu\text{s}$)	Sperrspannung Reverse voltage ($T_A = 25\text{ °C}$)	Durchlaßstrom Forward current ($T_A = 25\text{ °C}$)	Verlustleistung Power dissipation ($T_A = 25\text{ °C}$)	Wärmewiderstand Sperrschicht/Luft Thermal resistance Junction/Air
	Color*	T_{op} °C	T_{stg} °C	T_j °C	I_{FM} A	V_R V	I_F mA	P_{tot} mW	R_{thJA} K/W
TOPLED™	S, O, Y, G	-40 ... +100		+100	0.5	25	30	100	400
	P	-40 ... +100		+100	0.5	5	30	100	
	H	-40 ... +100		+100	0.5	3	30	90	
Super TOPLED	G	-40 ... +100		+100	1	25	50	190	300
	P	-40 ... +100		+100	1	5	50	190	
Hyper TOPLED	S, A, O	-40 ... +100		+125	1	3	30	80	500
	Y	-40 ... +100		+125	0.2	3	20	55	500
	B	-40 ... +100		+100	–	5	20	100	500
Power TOPLED	A	-40 ... +100		+125	–	3	70	130	300
	Y	-40 ... +100		+125	–	3	50	130	300
Low-current TOPLED	S, Y, G	-40 ... +100		+100	0.15	5	7.5	20	500
SIDELED	H	-40 ... +100		+100	0.5	3	30	90	430
	S, O, Y, G, P	-40 ... +100		+100	0.5	5	30	100	430
Super SIDELED	G, P	-40 ... +100		+100	1	5	50	190	330
Hyper SIDELED	S, A, O	-40 ... +100		+100	1	3	30	80	530
	Y	-40 ... +100		+100	0.2	3	20	55	530
	B	-40 ... +100		+100	–	5	20	100	530
Low-current SIDELED	S, Y, G	-40 ... +100		+100	0.15	5	7.5	20	430
Mini SIDELED	S, O, Y, G, P	-40 ... +100		+100	0.5	5	30	100	530
Micro SIDELED	S, A, O, Y	-40 ... +100		125	–	3	30	80	630
	T	-40 ... +100		125	–	5	15	60	530
	W	-40 ... +100		110	–	5	20	90	600
	G	-40 ... +100		100	–	5	30	80	500
	G	-40 ... +100		100	–	5	30	95	530
	B	-40 ... +100		100	–	5	20	90	630
	W, B	-40 ... +100		110	–	5	15	60	530
Hyper Mini SIDELED	S, A, O	-40 ... +100		+125	0.8	3	30	80	630
	Y	-40 ... +100		+125	0.2	3	20	55	630
	B	-40 ... +100		+100	–	5	20	100	630
Mini TOPLED	S, O, Y, G, P	-40 ... +100		+100	0.5	5	30	100	480
Hyper Mini TOPLED	S, A, O	-40 ... +100		+125	0.8	3	30	80	580
	Y	-40 ... +100		+125	0.2	3	20	55	580
	B	-40 ... +100		+100	–	5	20	100	580

LUMINESZENZDIODEN
LIGHT EMITTING DIODES

		Betriebstemperatur/ Operating temperature	Lagertemperatur/ Storage temperature	Sperrschichttemperatur/ Junction temperature	Stoßstrom Surge current ($T_A = 25\text{ °C}/t_p < 10\ \mu\text{s}$)	Sperrspannung Reverse voltage ($T_A = 25\text{ °C}$)	Durchlaßstrom Forward current ($T_A = 25\text{ °C}$)	Verlustleistung Power dissipation ($T_A = 25\text{ °C}$)	Wärmewiderstand Sperrschicht/Luft Thermal resistance Junction/Air
	Color*	T_{op} °C	T_{stg} °C	T_j °C	I_{FM} A	V_R V	I_F mA	P_{tot} mW	R_{thJA} K/W
SmartLED™	G	-40 ... +100		+110	–	5	20	95	500
	B, T	-40 ... +100		+100	–	5	15	60	450
	B, T	-40 ... +100		+100	–	5	20	85	450
	S, A	-40 ... +100		+110	–	5	60	170	500
	Y, O	-40 ... +100		+110	–	5	30	80	500
CHIPLED 0603	–	-30 ... +85	-40 ... +85	+95	–	5	25	70	–
CHIPLED 0805	–	-30 ... +85	-40 ... +85	+95	–	5	25	70	–
CHIPLED 1206	–	-30 ... +85	-40 ... +85	+95	–	5	25	70	–
Hyper CHIPLED 0603	–	-30 ... +85	-40 ... +85	+95	–	5	25	70	–
Hyper CHIPLED 0805	–	-30 ... +85	-40 ... +85	+95	–	5	25	70	–
Multi CHIPLED	–	-30 ... +85	-40 ... +85	+95	–	5	25	70	–
Hyper LED (3 + 5 mm)	S, A, O	-55 ... +100		+100	1	3	30	80	500
	Y	-55 ... +100		+100	0.2	3	20	55	500
	B	-40 ... +100		+100	–	5	20	100	500
LED (3 + 5 mm) ARGUS®	R	-55 ... +100		+100	0.5	25	45	100	400
	S, O, Y, G	-55 ... +100		+100	0.5	25	40 ¹⁾	140	
	P	-55 ... +100		+100	0.5	5	30 ¹⁾	100	
	H	-55 ... +100		+100	0.5	3	40	120	
Super ARGUS®	S, O, Y, G	-55 ... +100		+100	1	25	75	240	250
	P	-55 ... +100		+100	1	5	75	240	
Hyper ARGUS®	S, A, O	-55 ... +100		+100	1	3	30	80	500
	Y	-55 ... +100		+100	0.2	3	20	55	500
	H	-55 ... +100		+100	0.5	3	50	130	500
	B	-40 ... +100		+100	–	5	20	100	500
Low-current LED Low-current ARGUS®	S, Y, G	-55 ... +100		+100	0.15	25	7.5	20	500
Mini-LED	S, Y, G	-40 ... +80		+100	0.35	25	15	50	1100
Super ARGUS®	S, O, Y, G	-55 ... +100		+100	1	25	75	240	250
ARRAY LED	R, Y, G	-40 ... +80		+100	0.5	25	30	90	750

* R ≙ rot, H ≙ Hyper-rot, S ≙ Super-rot, O ≙ Orange, Y ≙ Gelb, G ≙ Grün, P ≙ Pure green, B ≙ Blau
 * R ≙ red, H ≙ hyper-red, S ≙ super-red, O ≙ orange, Y ≙ yellow, G ≙ green, P ≙ pure green, B ≙ blue

¹⁾ Gilt nicht für Zweifarben-LED mit antiparallel geschalteten Systemen

¹⁾ Not valid for two-color LED with antiparallel dies

Diese Daten gelten nicht für RL 50, 54, 55, YL 56, GL 56.

These data do not apply to RL 50, 54, 55, YL 56, GL 56.

Für Details siehe Datenblatt.

For details see data sheet.

LUMINESZENZDIODEN

LIGHT EMITTING DIODES

Kenndaten ($T_A = 25\text{ °C}$)

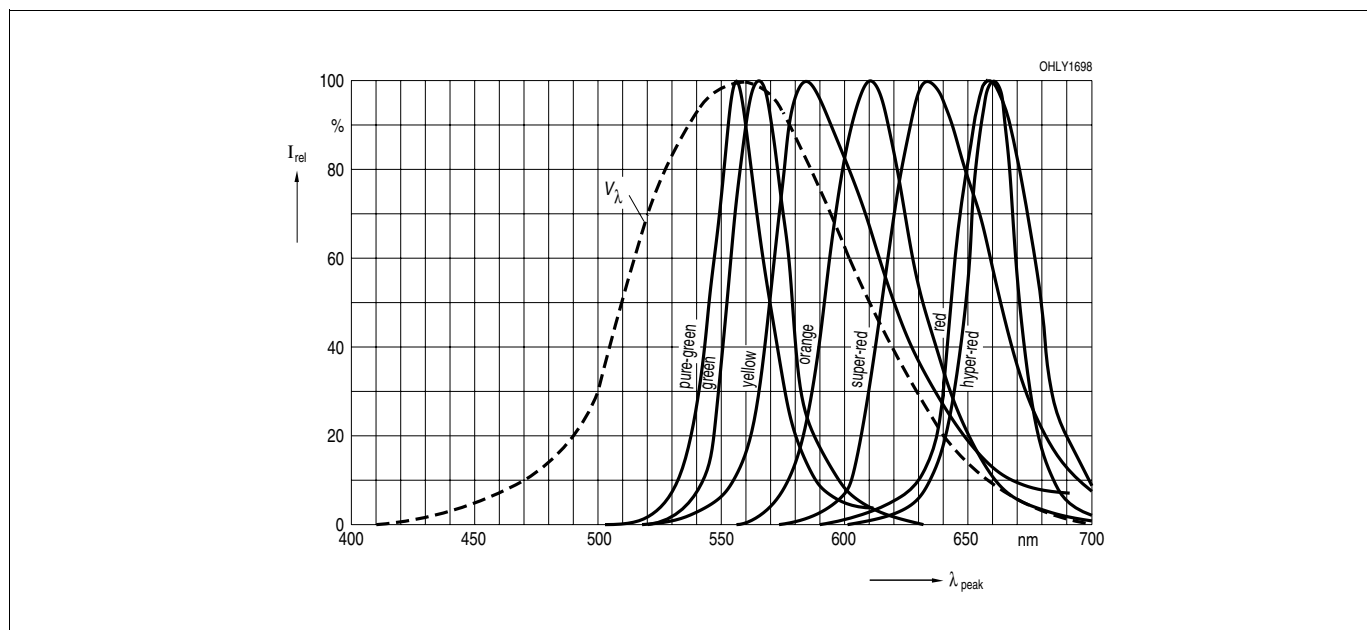
Typical values ($T_A = 25\text{ °C}$)

Standard-current-LED		red	hyper-red	super-red	orange	yellow	green	pure green	
Wellenlänge des emittierten Lichts/ Wavelength at peak emission $I_F = 10\text{ mA}$	λ_{peak}	660	660	635	610	586	572	557	nm
Dominantwellenlänge/ Dominant wavelength $I_F = 10\text{ mA}$	λ_{dom}	645	645	628	605	587	570	560	nm
Durchlassspannung/ Forward Voltage $I_F = 10\text{ mA}$	V_F	1.6 (≤ 2.0)	1.75 (≤ 2.6)	2.0 (≤ 2.6)	2.0 (≤ 2.6)	2.0 (≤ 2.6)	2.0 (≤ 2.6)	2.0 (≤ 2.6)	V

Low-current LED		super-red	yellow	green	
Wellenlänge des emittierten Lichts/Wavelength at peak emission $I_F = 7.5\text{ mA}$	λ_{peak}	635	586	572	nm
Dominantwellenlänge/Dominant wavelength $I_F = 7.5\text{ mA}$	λ_{dom}	628	587	570	nm
Durchlassspannung/Forward Voltage $I_F = 2\text{ mA}$	V_F	1.8 (≤ 2.6)	2.0 (≤ 2.7)	1.9 (≤ 2.6)	V

High-current LED		super-red	orange	yellow	green	pure green	
Wellenlänge des emittierten Lichts/Wavelength at peak emission $I_F = 20\text{ mA}$	λ_{peak}	635	610	586	565	557	nm
Dominantwellenlänge/Dominant wavelength $I_F = 20\text{ mA}$	λ_{dom}	628	605	587	570	560	nm
Durchlassspannung/Forward Voltage $I_F = 50\text{ mA}$	V_F	2.0 (≤ 3.8)	2.4 (≤ 3.8)	2.4 (≤ 3.8)	2.6 (≤ 3.8)	2.6 (≤ 3.8)	V

Standard-current LED, Low-current LED, High-current LED



LUMINESZENZDIODEN

LIGHT EMITTING DIODES

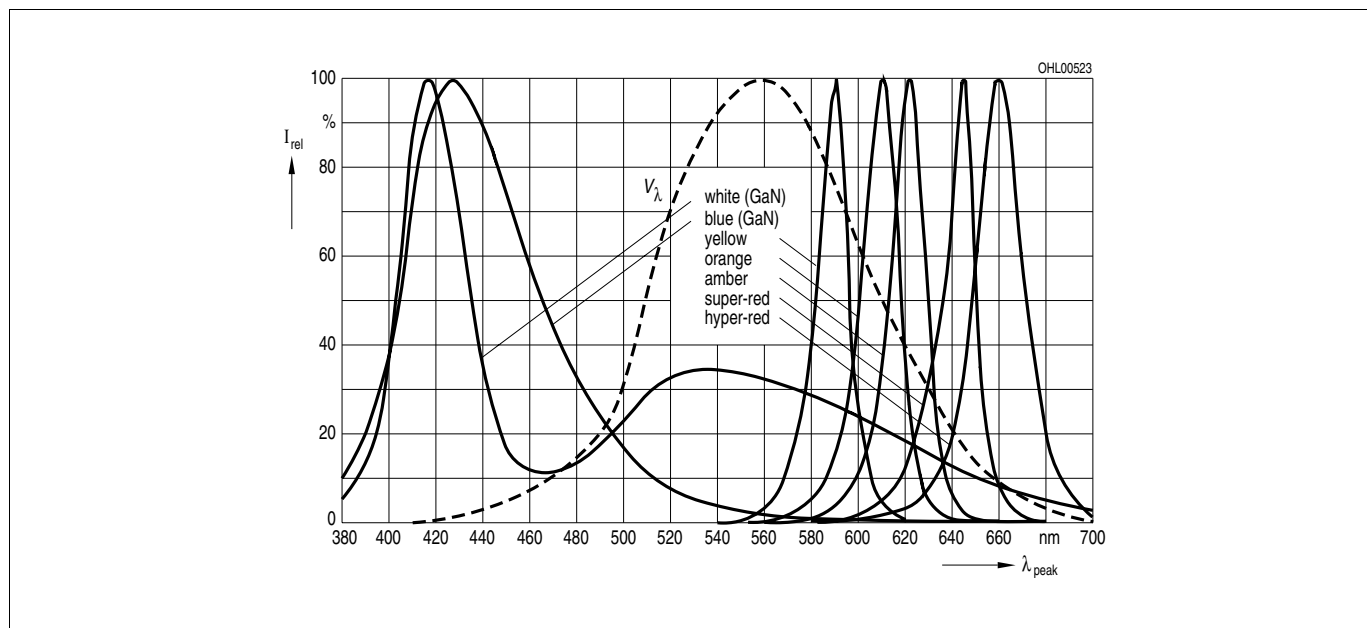
Kenndaten ($T_A = 25\text{ °C}$)

Typical values ($T_A = 25\text{ °C}$)

Hyper-Bright-LED		hyper-red	super-red	amber	orange	yellow	blue	
Wellenlänge des emittierten Lichts/ Wavelength at peak emission $I_F = 20\text{ mA}$	λ_{peak}	660	645	622	610	586	428	nm
Dominantwellenlänge/ Dominant wavelength $I_F = 20\text{ mA}$	λ_{dom}	645	633	615	606	587	465	nm
Durchlassspannung/ Forward Voltage $I_F = 20\text{ mA}$	V_F	2.0 (≤ 2.6)	2.0 (≤ 2.6)	2.0 (≤ 2.6)	2.0 (≤ 2.6)	2.0 (≤ 2.6)	3.5 ¹⁾ (≤ 4.2)	V

¹⁾ $I_F = 10\text{ mA}$

Hyper-Bright LED



LUMINESZENZDIODEN

LIGHT EMITTING DIODES

Kenndaten ($T_A = 25\text{ °C}$)

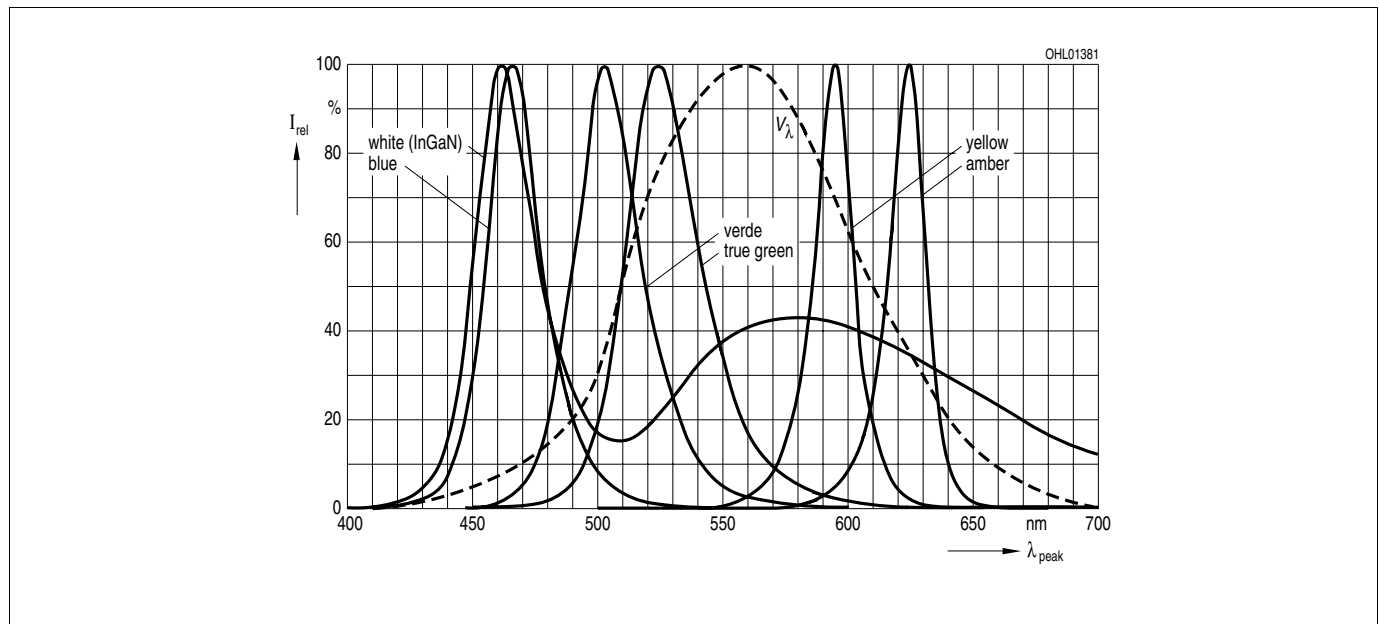
Typical values ($T_A = 25\text{ °C}$)

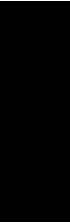
Single Chip White LED		LW T676 (GaN) $I_F = 10\text{ mA}$	LW T673 (InGaN) $I_F = 20\text{ mA}$	
Farbort des emittierten Lichts/ Color coordinate at peak emission		x = 0.30 y = 0.32	x = 0.32 y = 0.31	
Durchlassspannung/ Forward voltage	V_F	4.5	4.3	V

Standard-InGaN LED		blue	verde	true green	
Wellenlänge des emittierten Lichts/ Wavelength at peak emission $I_F = 20\text{ mA}$	λ_{peak}	465	503	523	nm
Dominantwellenlänge/ Dominant wavelength $I_F = 20\text{ mA}$	λ_{dom}	470	505	528	nm
Durchlassspannung/ Forward Voltage $I_F = 20\text{ mA}$	V_F	3.5	3.3	3.3	V

HOP (High Optical Power)		amber	yellow	
Wellenlänge des emittierten Lichts/ Wavelength at peak emission $I_F = 50\text{ mA}$	λ_{peak}	624	594	nm
Dominantwellenlänge/ Dominant wavelength $I_F = 50\text{ mA}$	λ_{dom}	617	587	nm
Durchlassspannung/ Forward Voltage $I_F = 50\text{ mA}$	V_F	2.0	1.9	V

Single Chip White LED, Standard-InGaN LED, HOP LED

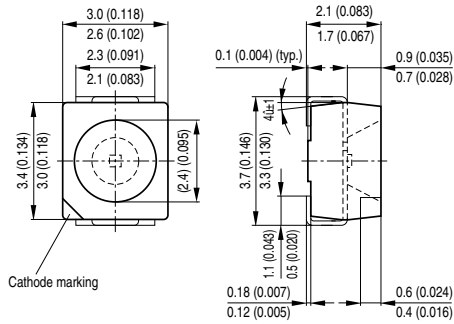




Maßbilder in mm (inch)

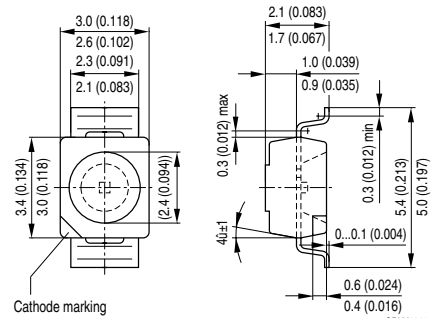
Outline Drawings dimensions in mm (inch)

Figure 1 L* T670, LG T671, L* T672, L* T673, LH T674, L* T675, L* T676, L* T679, L* T685, L* T686, L* T67C, L* T68C



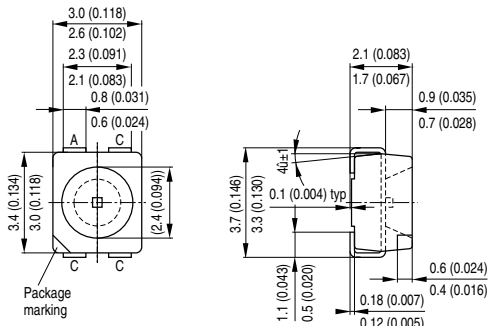
GPLY6724

Figure 2 LH T774, L* T770 L* T776, L* T773



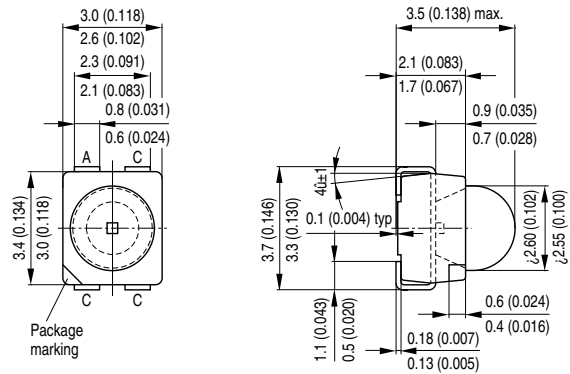
GPLY6899

Figure 3 L* E676, L* E675, L* E673, L* E675, L* E67C, L* E67B



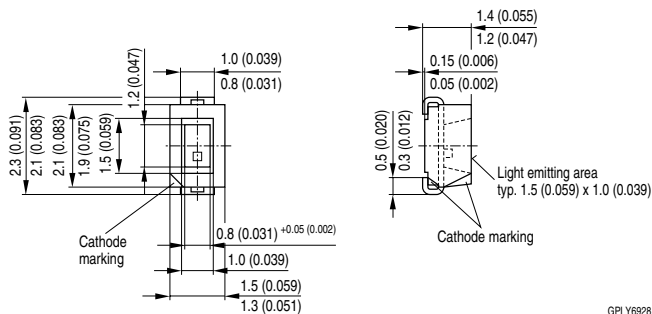
GPLY6991

Figure 4 L* E655, L* E65B, L* E63C



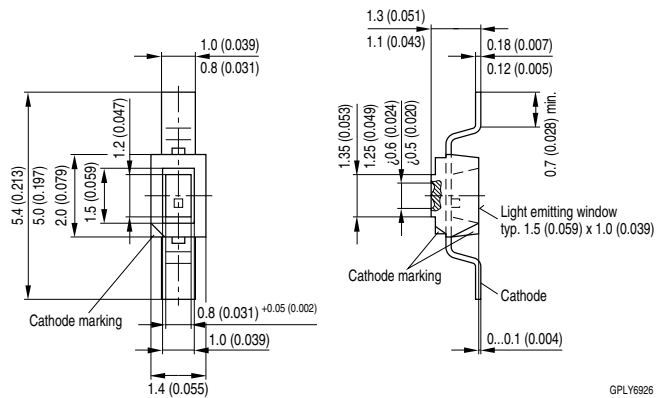
GPLY7000

Figure 5 L* M670, L* M676, L* M673,



GPLY6928

Figure 6 L* M770, L* M776, L* M779

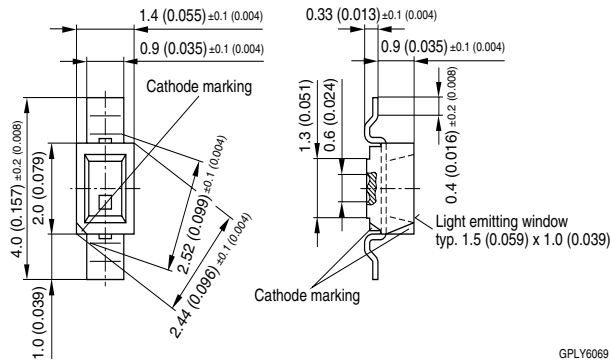


GPLY6926

Maßbilder in mm (inch)

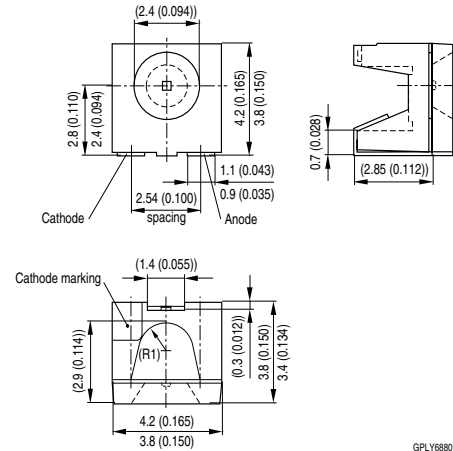
Outline Drawings dimensions in mm (inch)

Figure 7 LG M470



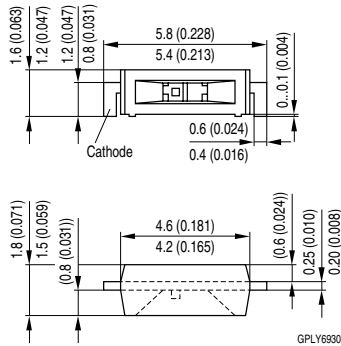
GPLY6069

Figure 8 LH A674, L* A670, L* A676, L* A675
L* A672, L* A679, L* A673, L* A67B



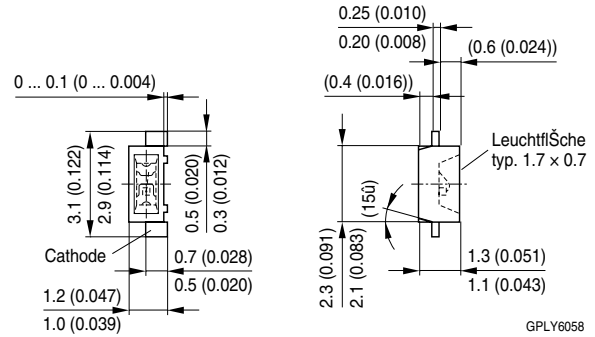
GPLY6880

Figure 9 L* C870, L* C876, L* C873



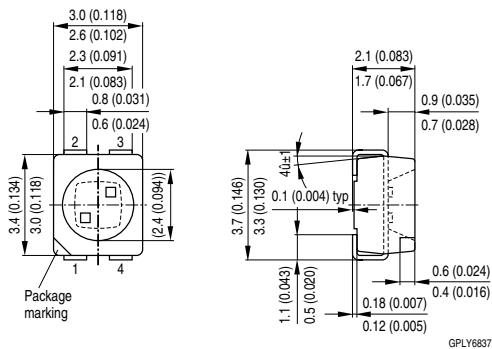
GPLY6930

Figure 10 L* Y870, L* Y876, L* Y87S, LW Y87C



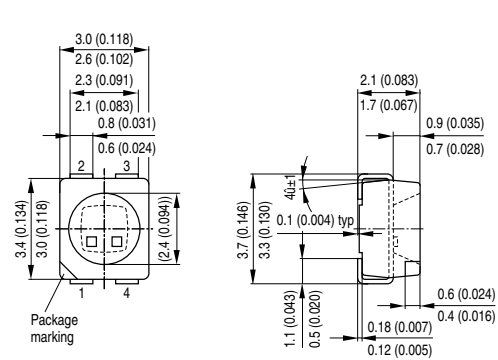
GPLY6058

Figure 11 L** T671, L** T676, L** T670



GPLY6837

Figure 12 LSG T677, LHG T680



GPLY6925

Maßbilder in mm (inch)

Outline Drawings dimensions in mm (inch)

Figure 13 LATB T686, LHGB T686, LATB T68B

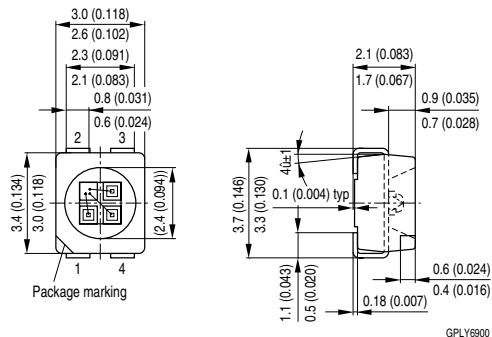


Figure 14 L** T770

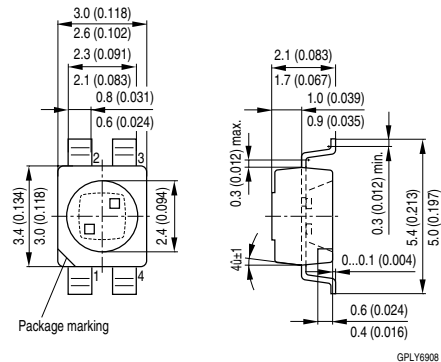


Figure 15 L** A676, L** A671

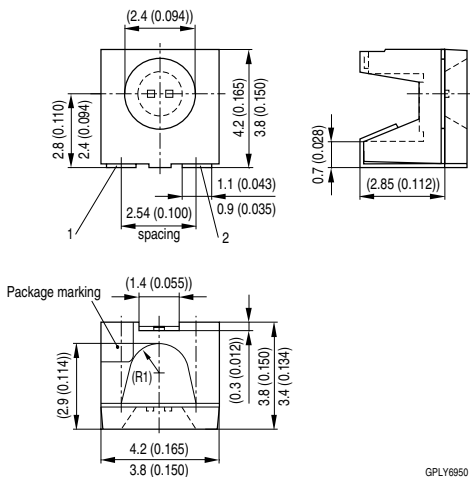


Figure 16 L* L890, L* L896, L* L89S, L* L893

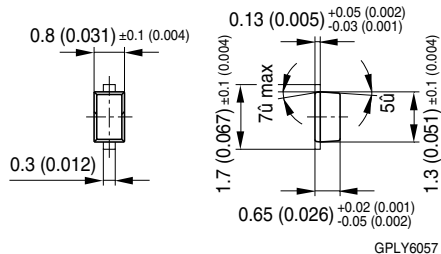


Figure 17 LH R974

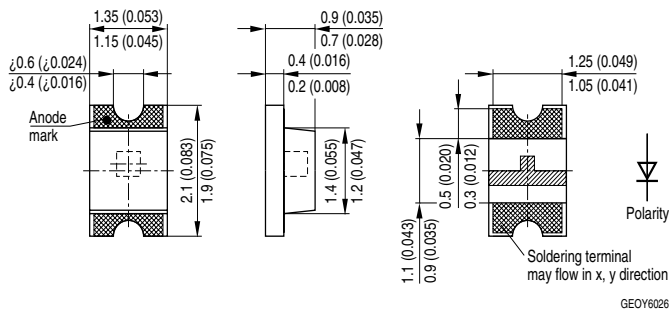
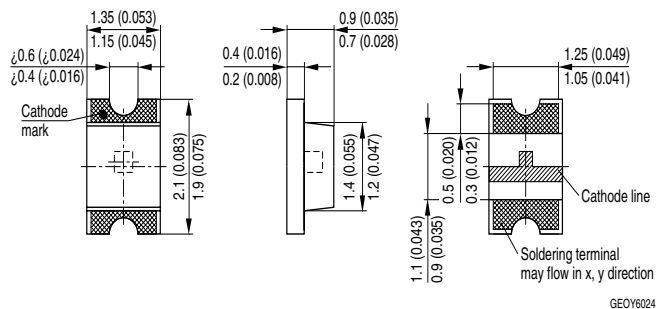


Figure 18 L* R971, L* R976



Maßbilder in mm (inch)

Outline Drawings dimensions in mm (inch)

Figure 19 LB R99A, LW R98A

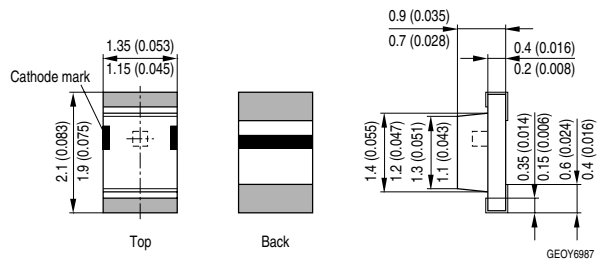


Figure 20 L* Q971, L* Q976

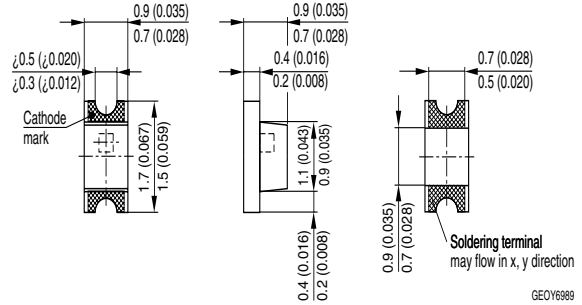


Figure 21 LB Q99A, L* Q993, LW Q98A, LW Q983, LO Q996

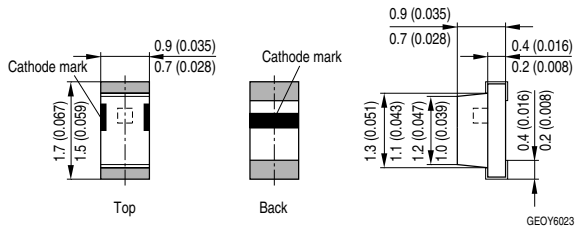


Figure 22 LW Q18S

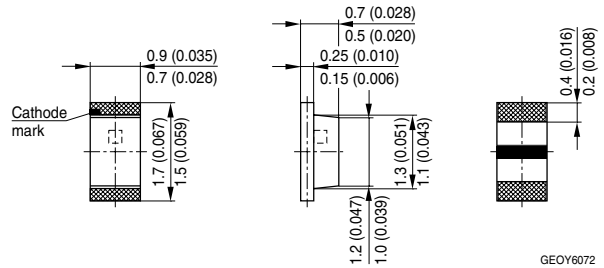


Figure 23 L* N971, LH N974

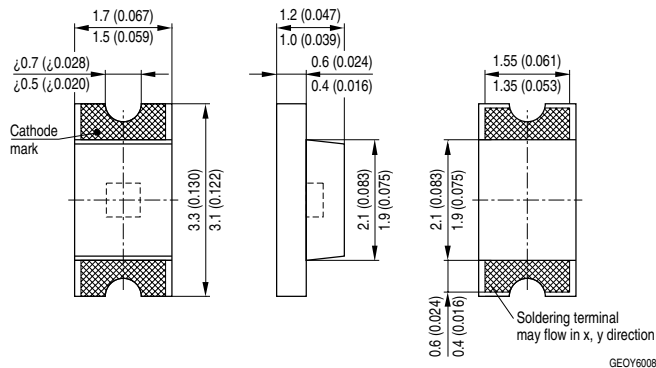
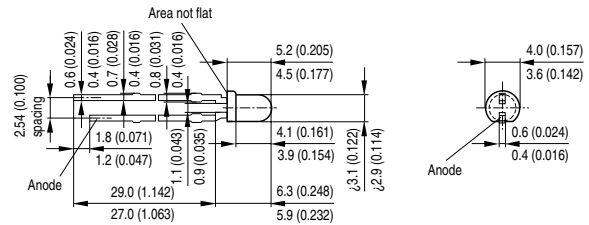


Figure 24 LH 3344, LH 3364



Maßbilder in mm (inch)

Outline Drawings dimensions in mm (inch)

Figure 25 L* 3341

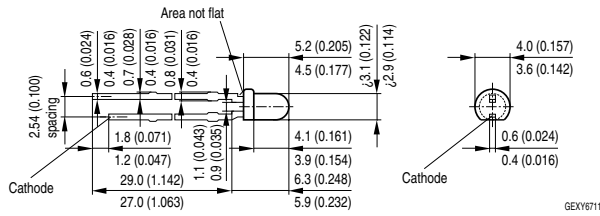


Figure 26 L* 3340, L* 3330

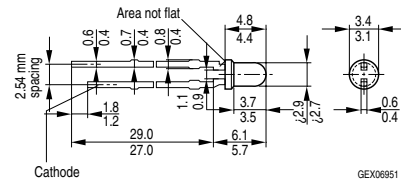


Figure 27 L* 3360, L* 3336, LB 3356, L* 3333, L* 3366
L* 3380, L* 3386, L* 3369

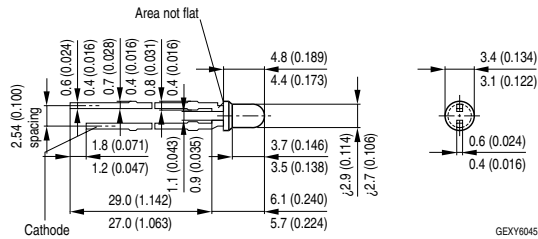


Figure 28 LSG 3331, LSG 3351

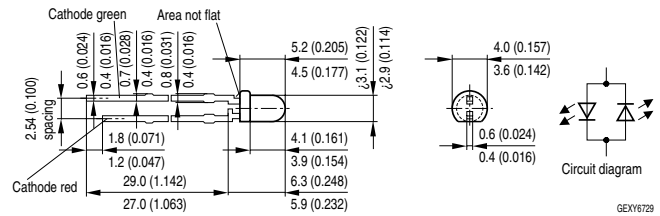


Figure 29 LH 5424, LH 5464

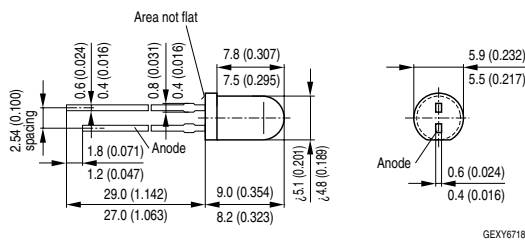
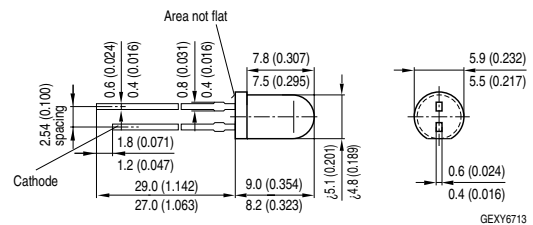


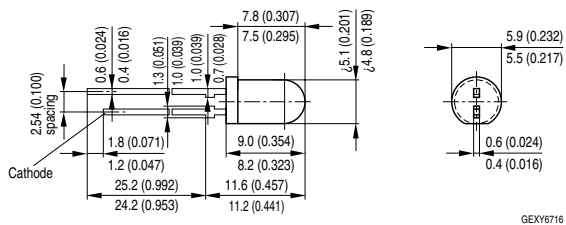
Figure 30 L* 5410, L* 5411, L* 5413, L* 5415, L* 5416, L* 541B,
L* 5420, L* 5421, L* 5426, L* 5433, L* 5436, L* 5456, L* 5460,
L* 5466, L* 5469, L* 5480



Maßbilder in mm (inch)

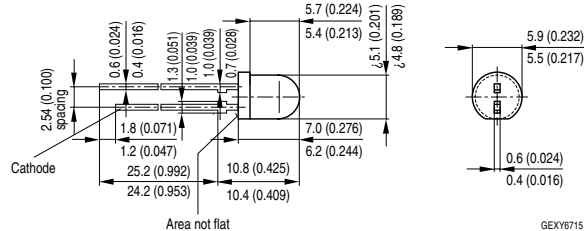
Outline Drawings dimensions in mm (inch)

Figure 31 L* 5360



GEXY6716

Figure 32 L* 5380



GEXY6715

Figure 33 L* K376, L* K380, L* K382, L* K389

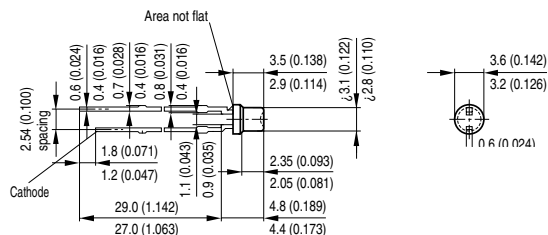
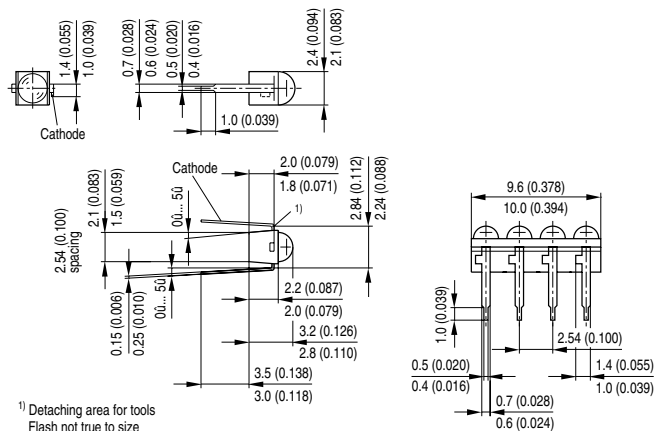
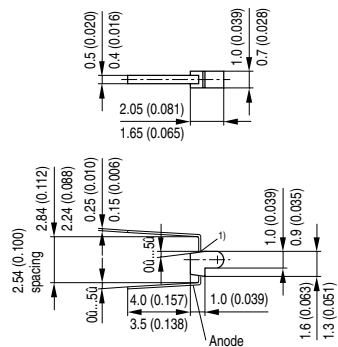


Figure 34 L* Z18*



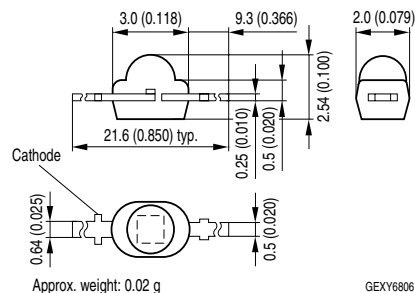
GEXY6726

Figure 35 L* U260



GEXY6722

Figure 36 RL 50, RL 54



GEXY6806

Maßbilder in mm (inch)

Outline Drawings dimensions in mm (inch)

Figure 37 RL 55, YL 56, GL 56

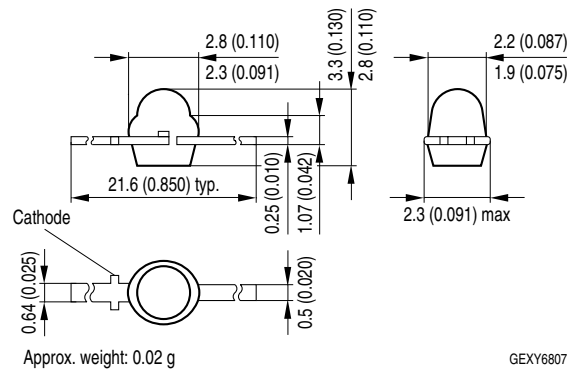
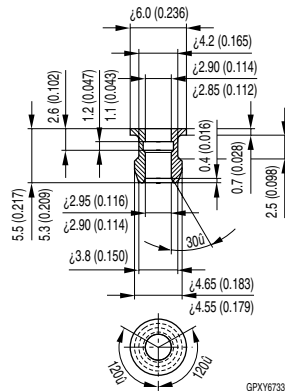
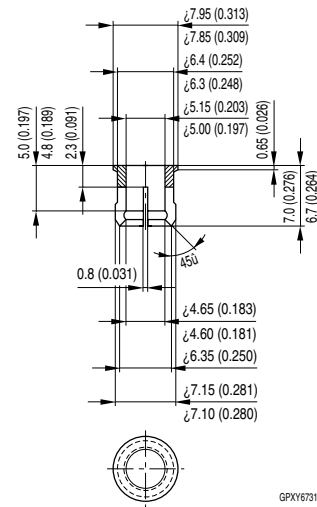


Figure 38 Hülse und Ring, 3 mm LED
Sleeves and ring, 3 mm LED:
Q62901-B61 (glass clear)
Q62901-B62 (black)



∅ Bohrung/bore = 4.3-4.4 mm^{*)}
Stärke der Montageplatte = 1.0-1.5 mm^{*)}
Thickness of mounting board = 1.0-1.5 mm^{*)}

Figure 39 Hülse und Ring, 5 mm LED
Sleeves and ring, 5 mm LED:
Q62901-B64 (glass clear)
Q62901-B65 (black)

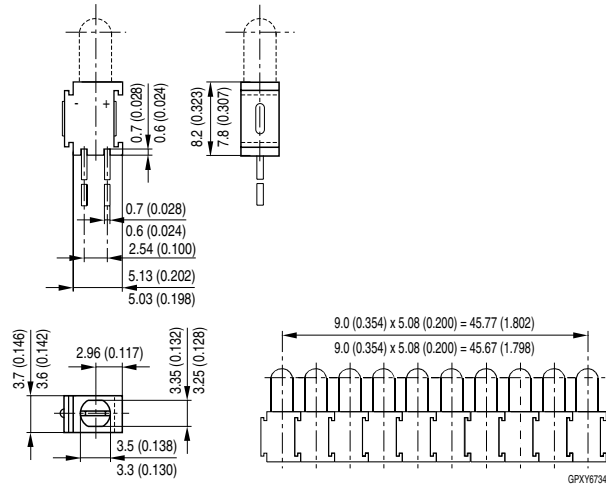


∅ Bohrung/bore = 6.45-6 mm^{*)}
Stärke der Montageplatte = 1.5-2.5 mm^{*)}
Thickness of mounting board = 1.5-2.5 mm^{*)}

Maßbilder in mm (inch)

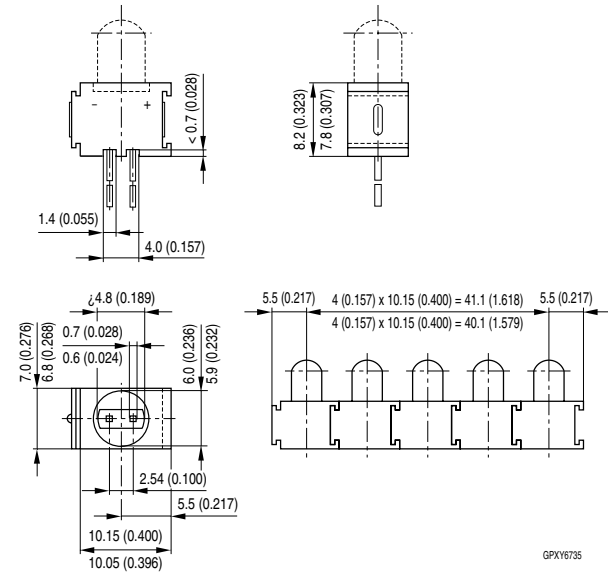
Outline Drawings dimensions in mm (inch)

Figure 40 Aneinanderreihbare Halterung für 3 mm LED
Endstackable clips for 3 mm LED
Q62902-B152-F222 (black)



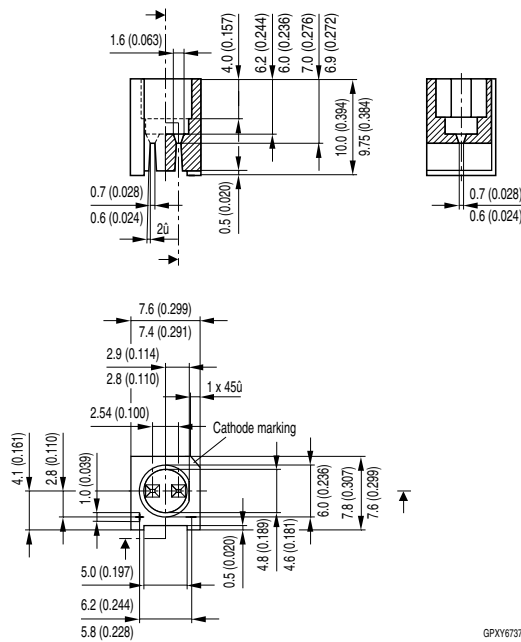
GPXY6734

Figure 41 Aneinanderreihbare Halterung für 5 mm LED
Endstackable clips for 5 mm LED
Q62902-B153-F222 (black)



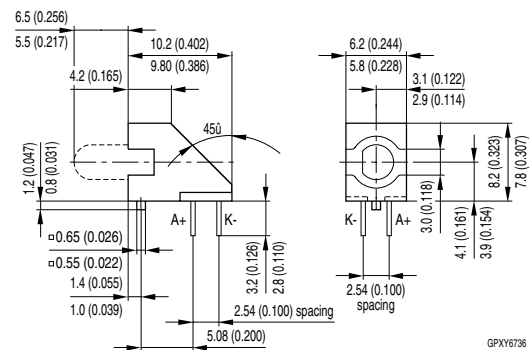
GPXY6735

Figure 42 Winkelhalterungen für 5 mm LED
Rectangular mounting part for 5 mm LED
Q62902-B156-F222 (grey)



GPXY6737

Figure 43 Winkelhalterungen für 3 mm LED
Rectangular mounting part for 3 mm LED
Q62902-B155-F222 (grey)

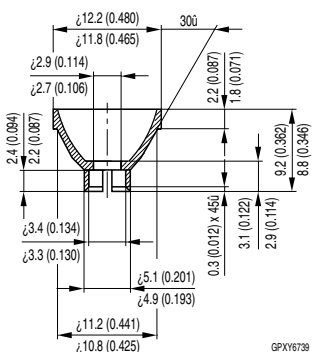


GPXY6736

Maßbilder in mm (inch)

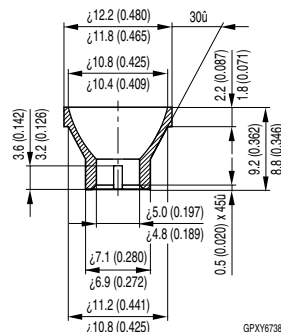
Outline Drawings dimensions in mm (inch)

Figure 44 Reflektor für 3 mm LED
Reflector für 3 mm LED
Q62902-B141-F222 (silver)



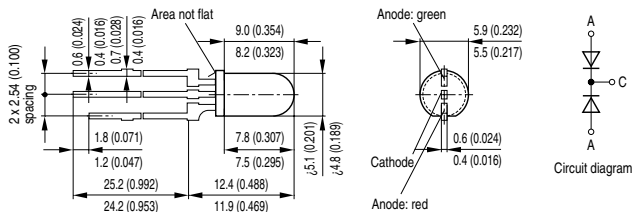
GPXY6739

Figure 45 Reflektor für 5 mm LED
Reflector für 5 mm LED
Q62902-B154-F222 (silver)



GPXY6738

Figure 46 LU5351



GEXY6720

Figure 47