SIEMENS

Multi SIDELED®
Bright Green Die

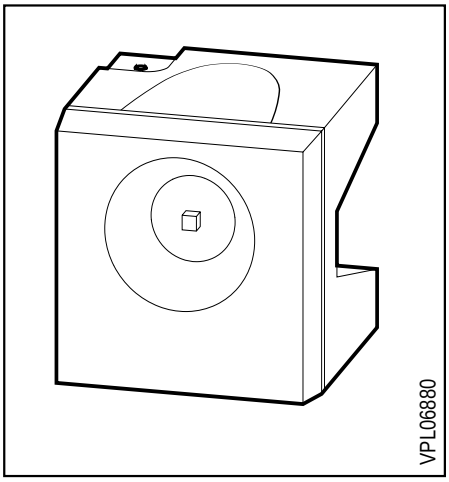
LSG A671

Besondere Merkmale

- Gehäusefarbe: weiß
- als optischer Indikator einstzbar
- zur Hinterleuchtung, Lichtleiter- und Linseneinkopplung
- für alle SMT-Bestück- und Löttechniken geeignet
- gegurtet (8-mm-Filmgurt)
- Störimpulsfest nach DIN 40839

Features

- color of package: white
- for use as optical indicator
- for backlighting, optical coupling into light pipes and lenses
- suitable for all SMT assembly and soldering methods
- available taped on reel (8 mm tape)
- load dump resistant acc. to DIN 40839



Typ **Type**	**Emissions-farbe** **Color of Emission**	**Farbe der Lichtaus-trittsfläche** **Color of the Light Emitting Area**	**Lichtstärke** **Luminous Intensity** I_F **= 10 mA** I_V **(mcd)**	**Lichtstrom** **Luminous Flux** I_F **= 10 mA** Φ_V **(mlm)**	**Bestellnummer** **Ordering Code**
LSG A671-HK	super-red/ green	colorless clear	2.5 ... 12.5	-	Q62703-Q3150
LSG A671-J			4.0 ... 8.0	18 (typ.)	Q62703-Q3152
LSG A671-K			6.3 ... 12.5	30 (typ.)	Q62703-Q3153
LSG A671-JL			4.0 ... 20.0	-	Q62703-Q3151

Streuung der Lichtstärke in einer Verpackungseinheit $I_{V\,max} / I_{V\,min} \leq 2.0$.
Luminous intensity ratio in one packaging unit $I_{V\,max} / I_{V\,min} \leq 2.0$.

Grenzwerte
Maximum Ratings

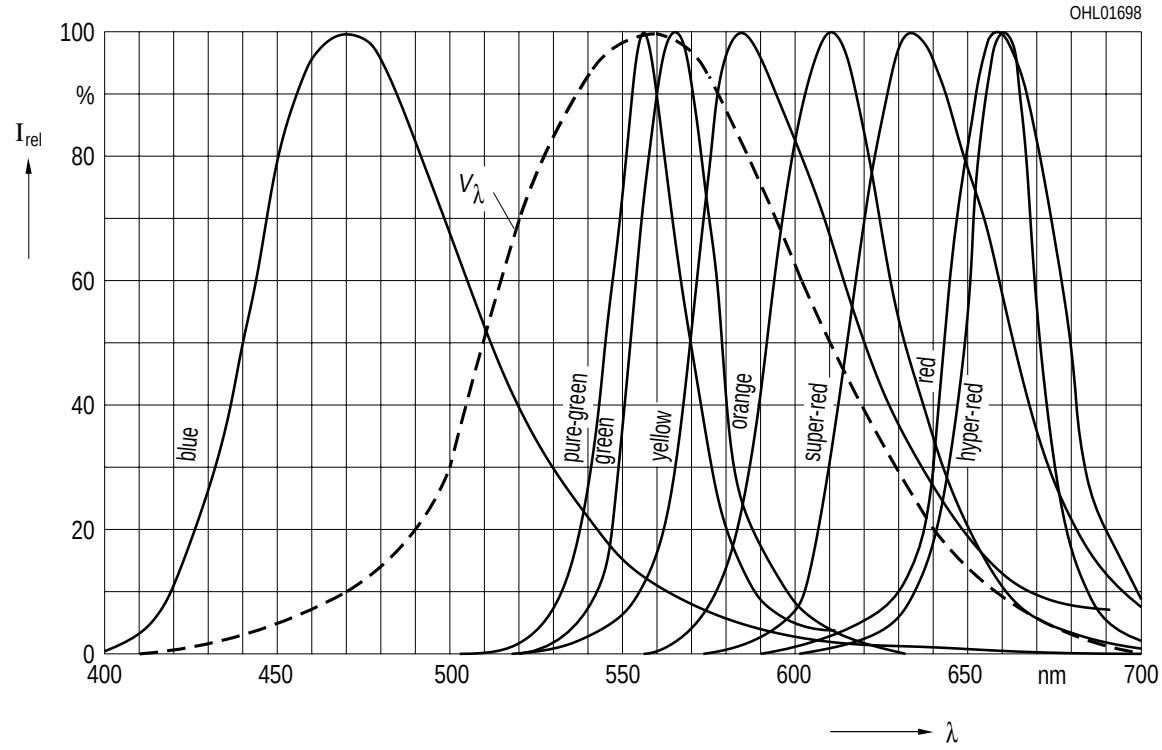
Bezeichnung **Parameter**	**Symbol** **Symbol**	**Werte** **Values**	**Einheit** **Unit**
Betriebstemperatur Operating temperature range	T_{op}	– 55 ... + 100	°C
Lagertemperatur Storage temperature range	T_{stg}	– 55 ... + 100	°C
Sperrschichttemperatur Junction temperature	T_j	+ 100	°C
Durchlaßstrom Forward current	I_F	30	mA
Stoßstrom Surge current $t \leq 10$ µs, $D = 0.005$	I_{FM}	0.5	A
Verlustleistung Power dissipation	P_{tot}	100	mW
Wärmewiderstand Thermal resistance Sperrschicht / Umgebung Junction / air Montage auf PC-board*) (Padgröße ≥ 16 mm^2) mounted on PC board*) (pad size ≥ 16 mm^2)	$R_{th\ JA}$	400	K/W

*) PC-board: FR4

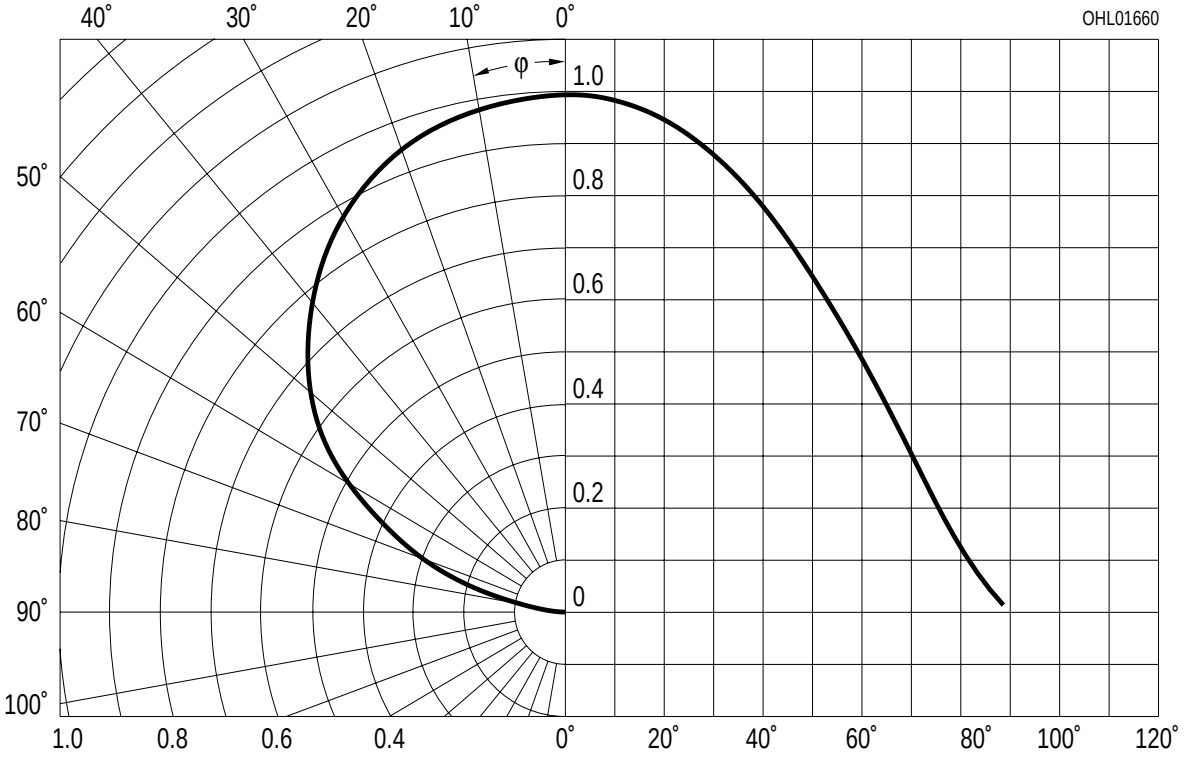
Kennwerte (T_A = 25 ˚C)
Characteristics

Bezeichnung **Parameter**	**Symbol** **Symbol**	**Werte** **Values**		**Einheit** **Unit**
		LS	**LG**	
Wellenlänge des emittierten Lichtes (typ.) Wavelength at peak emission (typ.) I_F = 10 mA	λ_{peak}	635	565	nm
Dominantwellenlänge (typ.) Dominant wavelength (typ.) I_F = 10 mA	λ_{dom}	628	570	nm
Spektrale Bandbreite bei 50 % $I_{rel\ max}$ (typ.) Spectral bandwidth at 50 % $I_{rel\ max}$ (typ.) I_F = 10 mA	$\Delta\lambda$	45	25	nm
Abstrahlwinkel bei 50 % I_v (Vollwinkel) Viewing angle at 50 % I_v	2φ	120	120	Grad deg.
Durchlaßspannung (typ.) Forward voltage (max.) I_F = 10 mA	V_F V_F	2.0 2.6	2.0 2.6	V V
Kapazität (typ.) Capacitance V_R = 0 V, f = 1 MHz	C_0	12	15	pF
Schaltzeiten: Switching times: I_V from 10 % to 90 % (typ.) I_V from 90 % to 10 % (typ.) I_F = 100 mA, t_p = 10 µs, R_L = 50 Ω	 t_r t_f	 300 150	 450 200	 ns ns

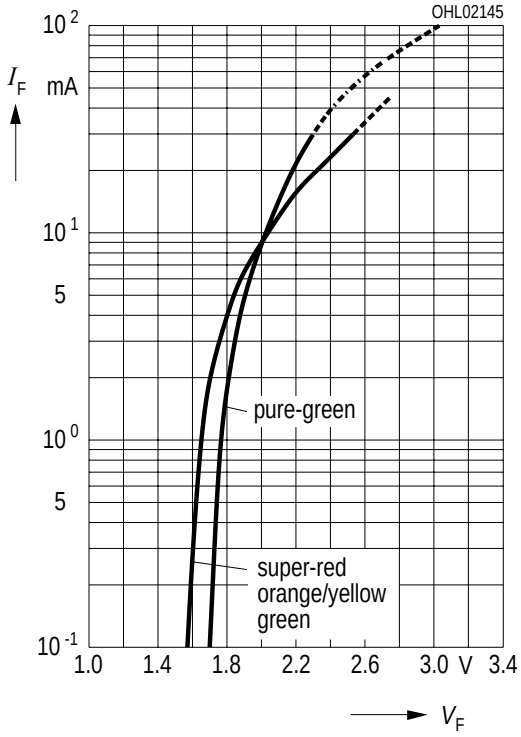
Relative spektrale Emission $I_{rel} = f(\lambda)$, $T_A = 25$ °C, $I_F = 10$ mA
Relative spectral emission
V(λ) = spektrale Augenempfindlichkeit
Standard eye response curve



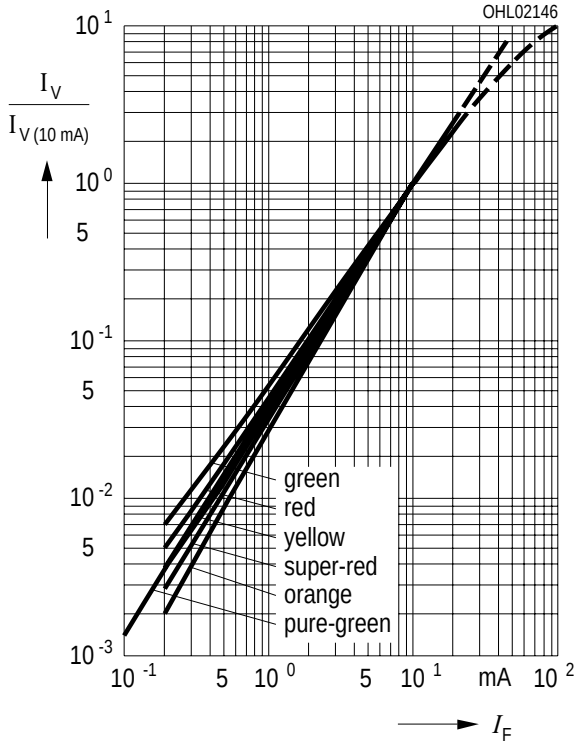
Abstrahlcharakteristik $I_{rel} = f(\varphi)$
Radiation characteristic



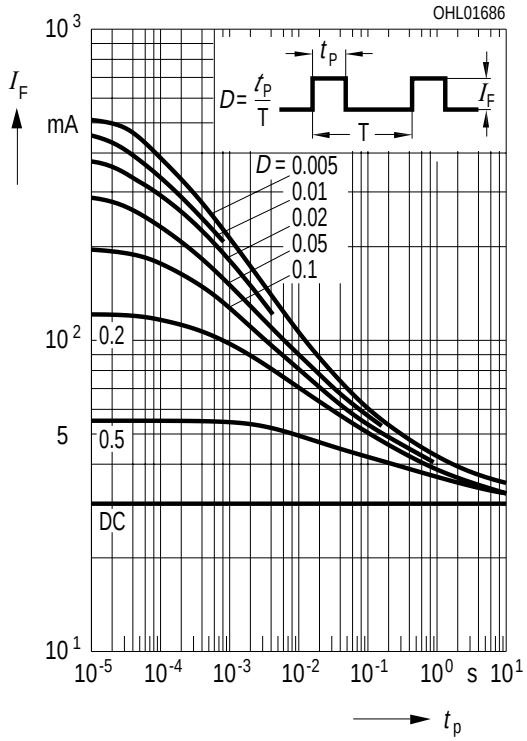
Durchlaßstrom $I_F = f(V_F)$
Forward current
T_A = 25 ˚C



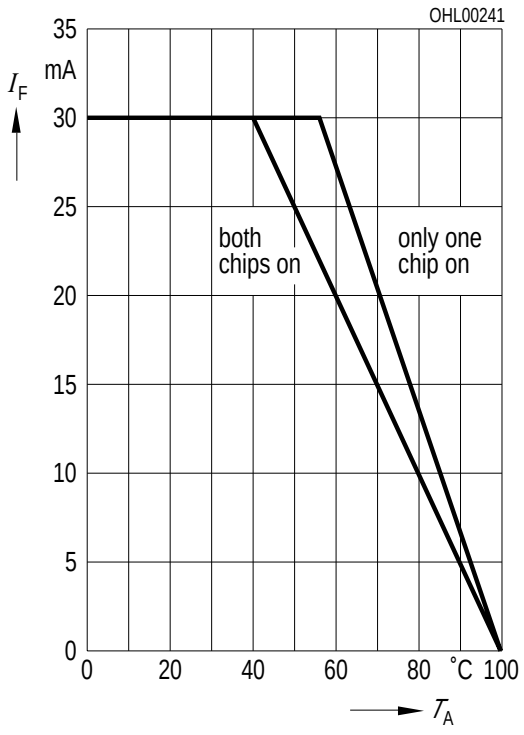
Relative Lichtstärke $I_V/I_{V(10\ mA)} = f(I_F)$
Relative luminous intensity
T_A = 25 ˚C



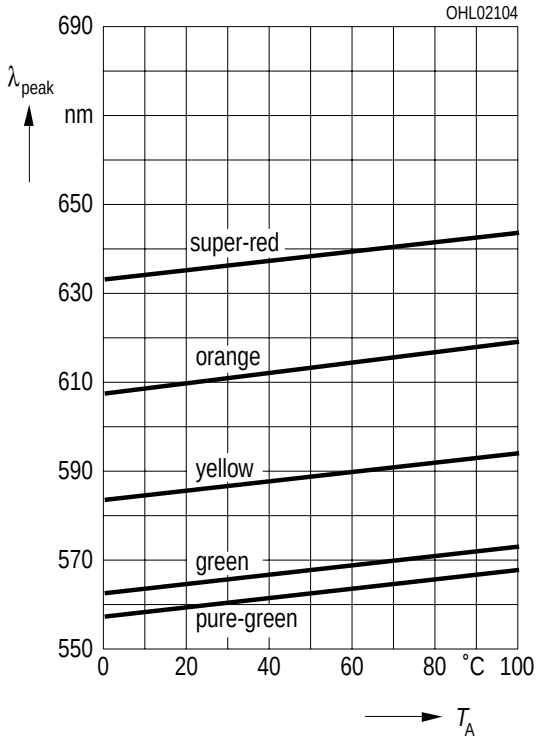
Zulässige Impulsbelastbarkeit $I_F = f(t_p)$
Permissible pulse handling capability
Duty cycle D = parameter, T_A = 25 ˚C



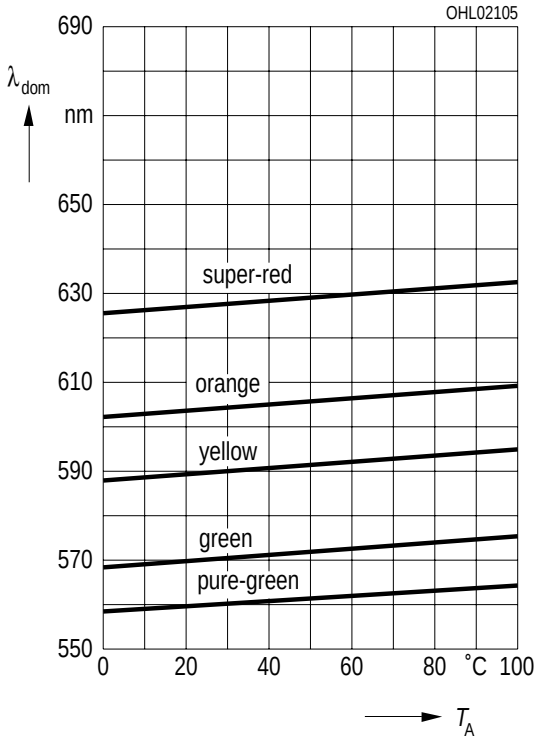
Maximal zulässiger Durchlaßstrom
Max. permissible forward current
$I_F = f(T_A)$



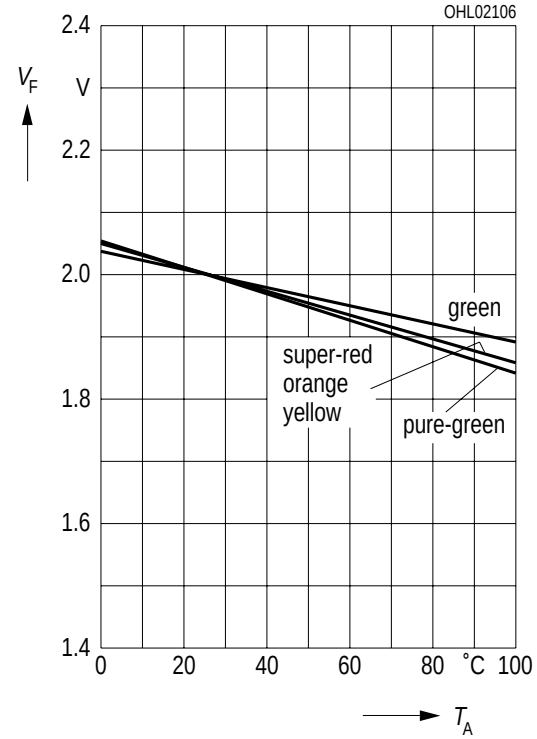
Wellenlänge der Strahlung $\lambda_{peak} = f(T_A)$
Wavelength at peak emission
I_F = 10 mA



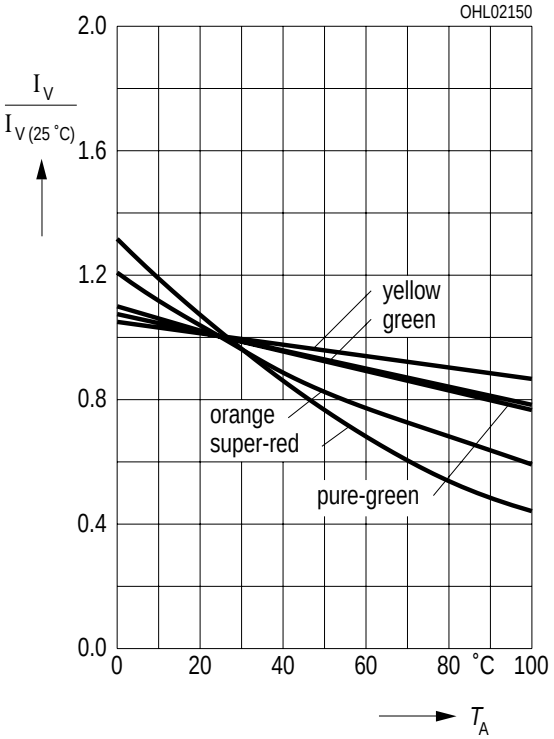
Dominantwellenlänge $\lambda_{dom} = f(T_A)$
Dominant wavelength
I_F = 10 mA



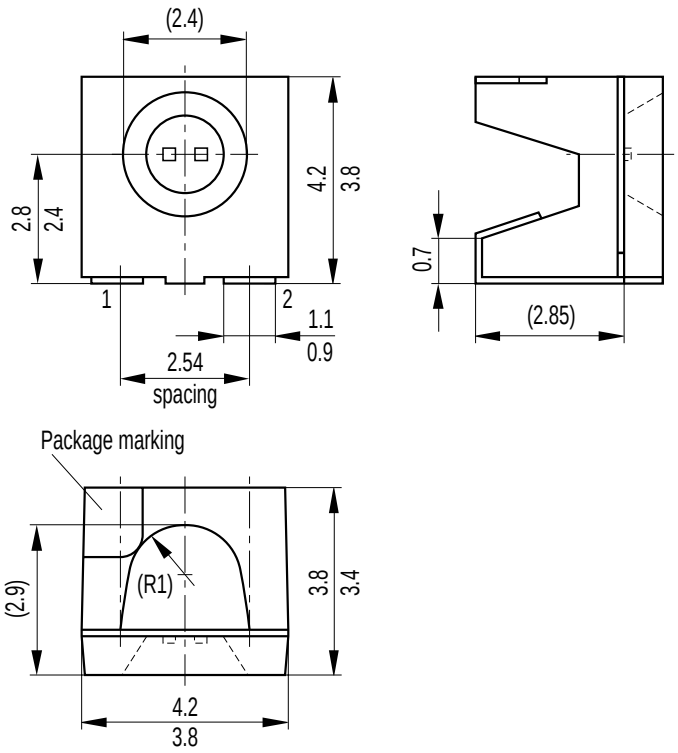
Durchlaßspannung $V_F = f(T_A)$
Forward voltage
I_F = 10 mA



Relative Lichtstärke $I_V / I_{V(25\,^\circ C)} = f(T_A)$
Relative luminous intensity
I_F = 10 mA



Maßzeichnung (Maße in mm, wenn nicht anders angegeben)
Package Outlines (Dimensions in mm, unless otherwise specified)



L	S	G	A671
LED	Emission color 1	Emission color 2	Package
	cathode: pin 1	cathode: pin 2	

GPL06950

Kathodenkennung: abgeschrägte Ecke
Cathode mark: bevelled edge