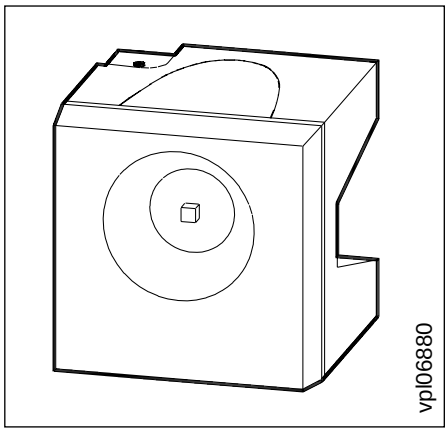
SIEMENS

Hyper Multi SIDELED®
Hyper-Bright LED

LSY A676



Besondere Merkmale

- Gehäusefarbe: weiß
- als optischer Indikator einsetzbar
- zur Hintergrundbeleuchtung, Lichtleiter- und Linseneinkopplung
- hohe Signalwirkung durch Farbwechsel der LED möglich
- bei geeigneter Ansteuerung, Farbwechsel von grün über gelb und orange bis super-rot möglich
- für alle SMT-Bestück- und Löttechniken geeignet
- gegurtet (12-mm-Filmgurt)

Features

- color of package: white
- for use as optical indicator
- for backlighting, optical coupling into light pipes and lenses
- high signal efficiency possible by color change of the LED
- with appropriate controlling it is possible to change color from green to yellow and orange to super-red
- suitable for all SMT assembly and soldering methods
- available taped on reel (12 mm tape)

Typ **Type**	**Emissionsfarbe** **Color of Emission**	**Farbe der Lichtaustrittsfläche** **Color of the Light Emitting Area**	**Lichtstärke** **Luminous Intensity** I_F **= 20 mA** I_V**(mcd)**		**Bestellnummer** **Ordering Code**
			super-red	**yellow**	
LSY A676	super-red / yellow	colorless clear	≥ 40	≥ 40	Q62703-Q3374
LSY A676-P+P			40... 80	40... 80	
LSY A676-P+Q			40... 80	63... 125	
LSY A676-P+R			40... 80	100...200	
LSY A676-Q+Q			63...125	63... 125	
LSY A676-Q+R			63...125	100...200	

Grenzwerte
Maximum Ratings

Bezeichnung **Parameter**	**Symbol** **Symbol**	**Wert** **Value**		**Einheit** **Unit**
		S	**Y**	
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	20	mA
Stoßstrom Surge current $t \leq 10$ µs, $D = 0.005$	I_{FM}	to be defined		A
Verlustleistung Power dissipation	P_{tot}	80	55	mW
Wärmewiderstand Thermal resistance Sperrschicht / Umgebung Junction / air Montage auf PC-Board* (Padgröße ≥ 16 mm²) mounted on PC board* (pad size ≥ 16 mm²)	$R_{th\ JA}$	530		K/W

* PC-board: FR4

Notes

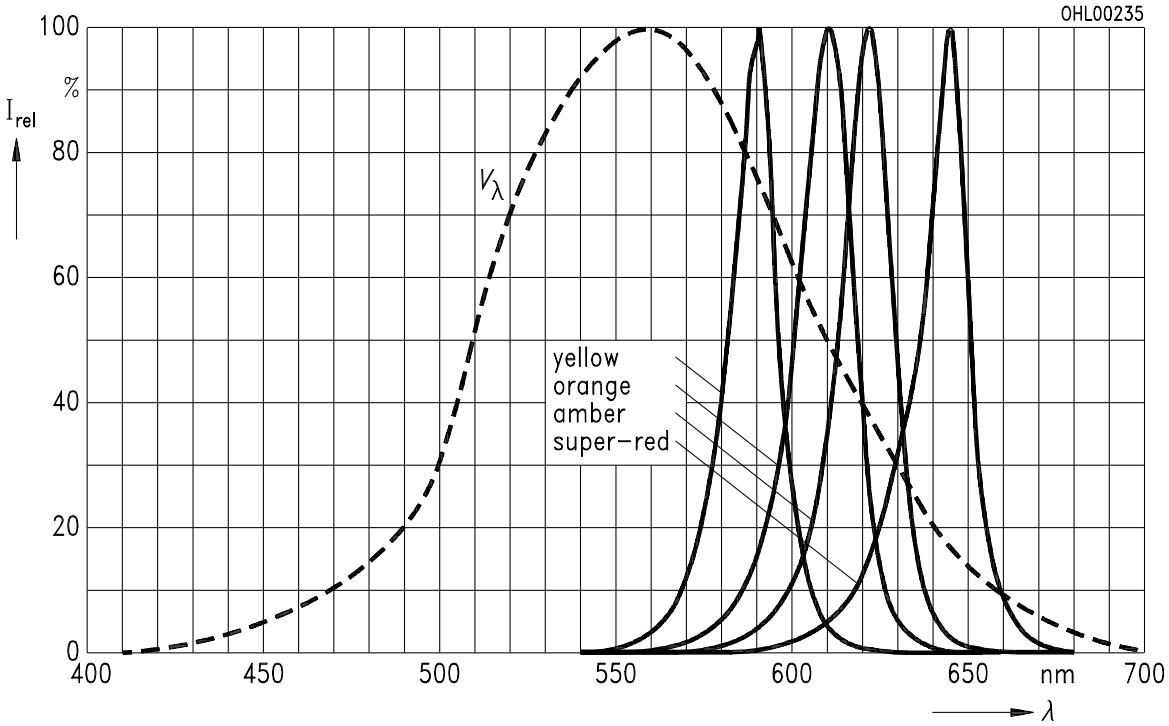
Die angegebenen Grenzdaten gelten für den Chip, für den sie angegeben sind, unabhängig vom Betriebszustand des anderen.

The stated maximum ratings refer to the specified chip, regardless of the other one's operating status.

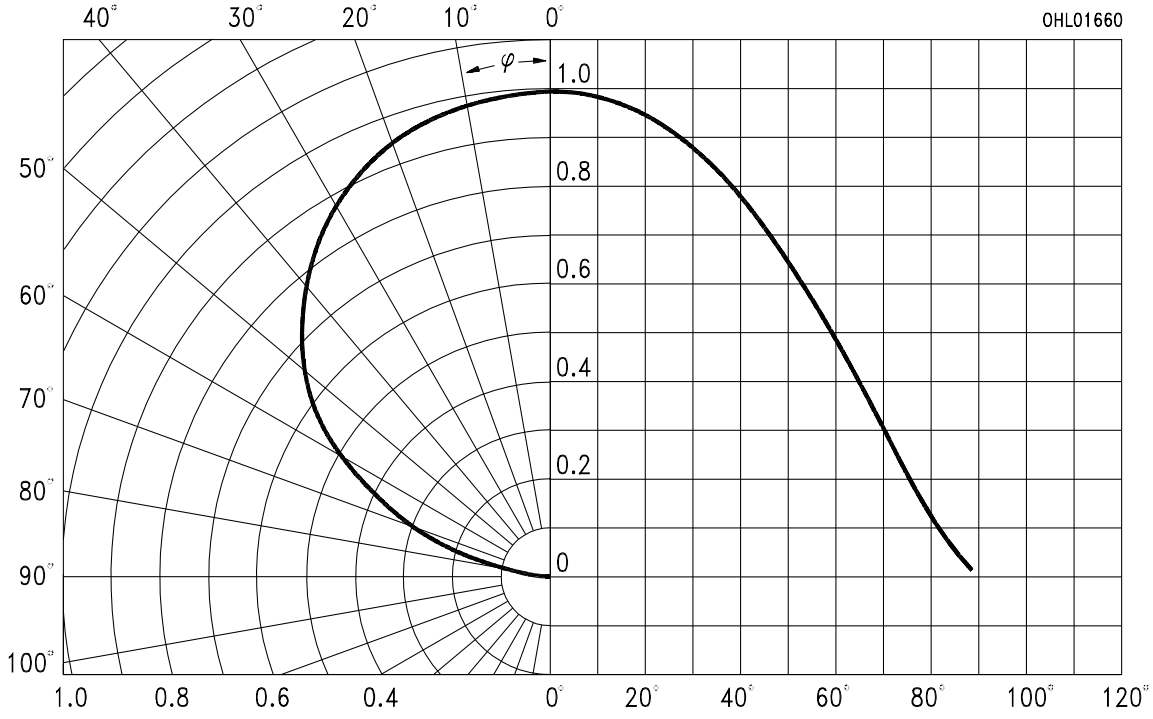
Kennwerte (T_A = 25 ˚C)
Characteristics

Bezeichnung **Parameter**	**Symbol** **Symbol**	**Wert** **Value**		**Ein-heit** **Unit**
		S	**Y**	
Wellenlänge des emittierten Lichtes (typ.) Wavelength at peak emission (typ.) I_F = 10 mA	λ_{peak}	645	591	nm
Dominantwellenlänge (typ.) Dominant wavelength (typ.) I_F = 10 mA	λ_{dom}	632	587	nm
Spektrale Bandbreite bei 50 % $I_{rel\ max}$ (typ.) Spectral bandwidth at 50 % $I_{rel\ max}$ (typ.) I_F = 10 mA	$\Delta\lambda$	16	15	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 = 20 mA	V_F V_F	2.0 2.6	2.0 2.6	V V
Temperaturkoeffizient von λ_{dom} (I_F = 20 mA) Temperature coefficient of λ_{dom} (I_F = 20 mA)	TC_λ	0.014	0.096	nm/K
Temperaturkoeffizient von λ_{peak}, I_F = 20 mA (typ.) Temperature coefficient of λ_{peak}, I_F = 20 mA (typ.)	TC_λ	0.14	0.13	nm/K
Temperaturkoeffizient von V_F, I_F = 20 mA (typ.) Temperature coefficient of V_F, I_F = 20 mA (typ.)	TC_V	– 1.95	–2.51	mV/K

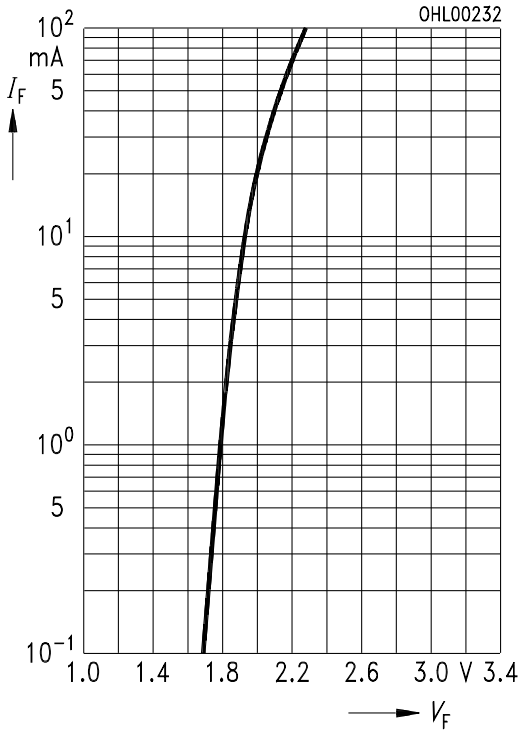
Relative spektrale Emission $I_{rel} = f(\lambda)$, $T_A = 25$ °C, $I_F = 10$ mA
Relative spectral emission
V (λ) = spektrale Augenempfindlichkeit
Standard eye response curve



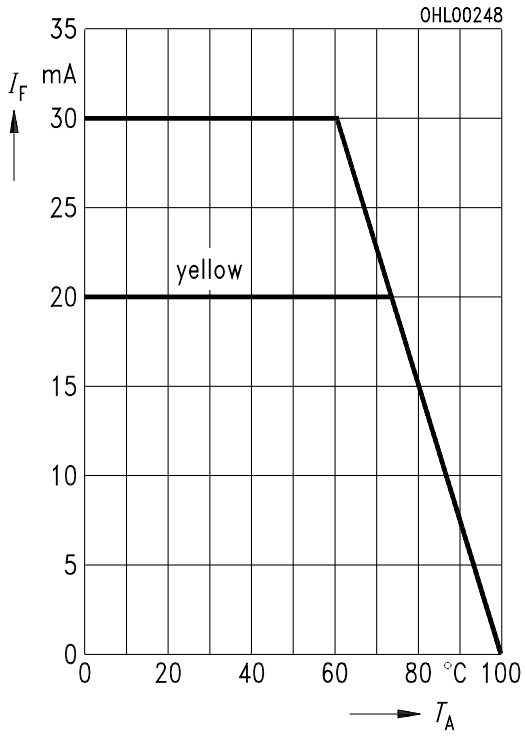
Abstrahlcharakteristik $I_{rel} = f(\varphi)$
Radiation characteristic



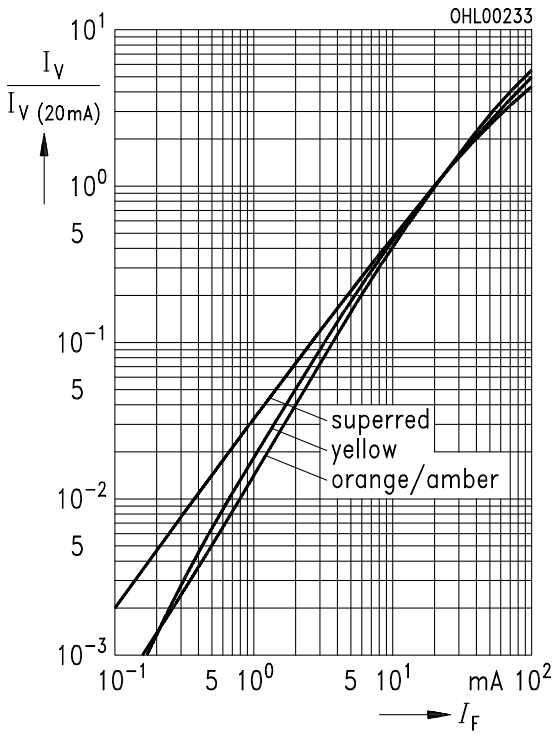
Durchlaßstrom $I_F = f(V_F)$
Forward current
T_A = 25 ˚C



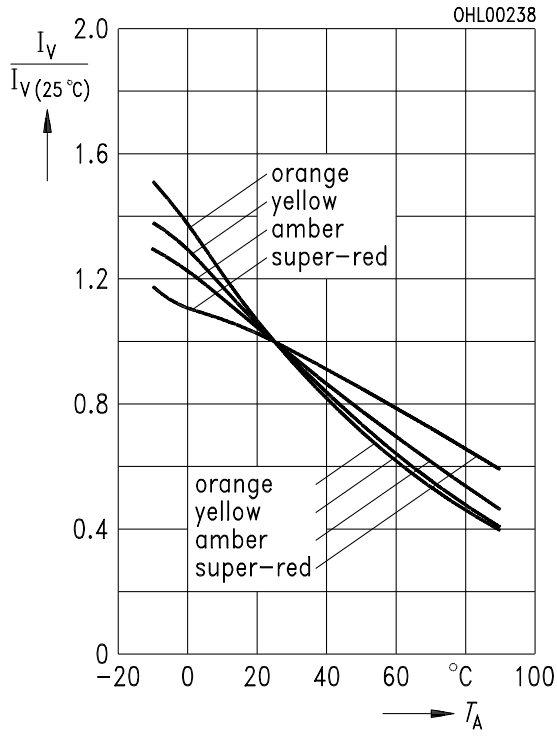
Maximal zulässiger Durchlaßstrom $I_F = f(T_A)$
Max. permissible forward current



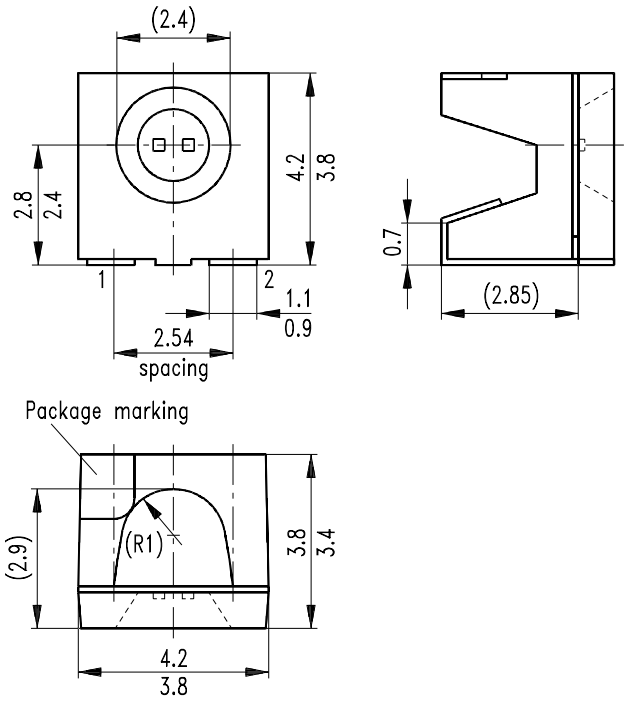
Relative Lichtstärke $I_V / I_{V(20\ mA)} = f(I_F)$
Relative luminous intensity
T_A = 25 ˚C



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	Y	A676
LED	Emission color 1	Emission color 2	Package
	Cathode: pin 1	Cathode: pin 2	

GPL06950