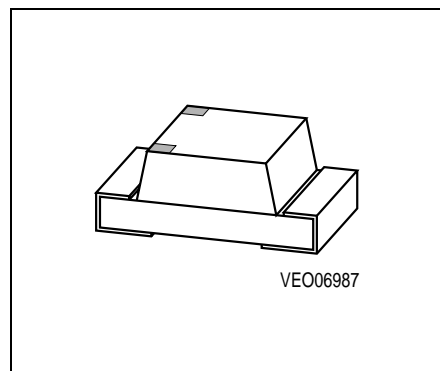


Besondere Merkmale

- Gehäusebauform: 0805
- Industriestandard bzgl. Lötpadraster
- geringe Bauteilhöhe
- für IR-Lötung geeignet
- für Hinterleuchtungen und als opt. Indikator einsetzbar
- gegurtet (8-mm-Filmgurt)

Features

- 0805 package
- Industry standard footprint
- low profile
- suitable for IR reflow soldering process
- for use as optical indicator and backlighting
- available taped on reel (8 mm tape)



Typ	Emissionsfarbe	Farbe der Lichtaustrittsfläche	Lichtstärke	Lichtstrom	Bestellnummer
Type	Color of Emission	Color of the Light Emitting Area	Luminous Intensity $I_F = 20 \text{ mA}$ $I_V \text{ (mcd)}$	Luminous Flux $I_F = 20 \text{ mA}$ $\Phi_V \text{ (mlm)}$	Ordering Code
LG R971-KO	green	colorless clear	$\geq 6.30 \text{ (12 typ.)}$	100 (typ.)	Q62702-P5099

Grenzwerte
Maximum Ratings

Bezeichnung Parameter	Symbol Symbol	Werte Values	Einheit Unit
Betriebstemperatur Operating temperature range	T_{op}	- 30 ... + 85	°C
Lagertemperatur Storage temperature range	T_{stg}	- 40 ... + 85	°C
Sperrschichttemperatur Junction temperature	T_j	+ 95	°C
Durchlaßstrom Forward current	I_F	25	mA
Stoßstrom Surge current $t_p \leq 10 \mu s, D = 0.005$	I_{FM}	0.1	A
Sperrspannung Reverse voltage	V_R	5	V
Verlustleistung Power dissipation	P_{tot}	70	mW
Wärmewiderstand Sperrschicht / Umgebung Thermal resistance Junction / air	$R_{th JA}$	610	K/W

Kennwerte ($T_A = 25\text{ °C}$)

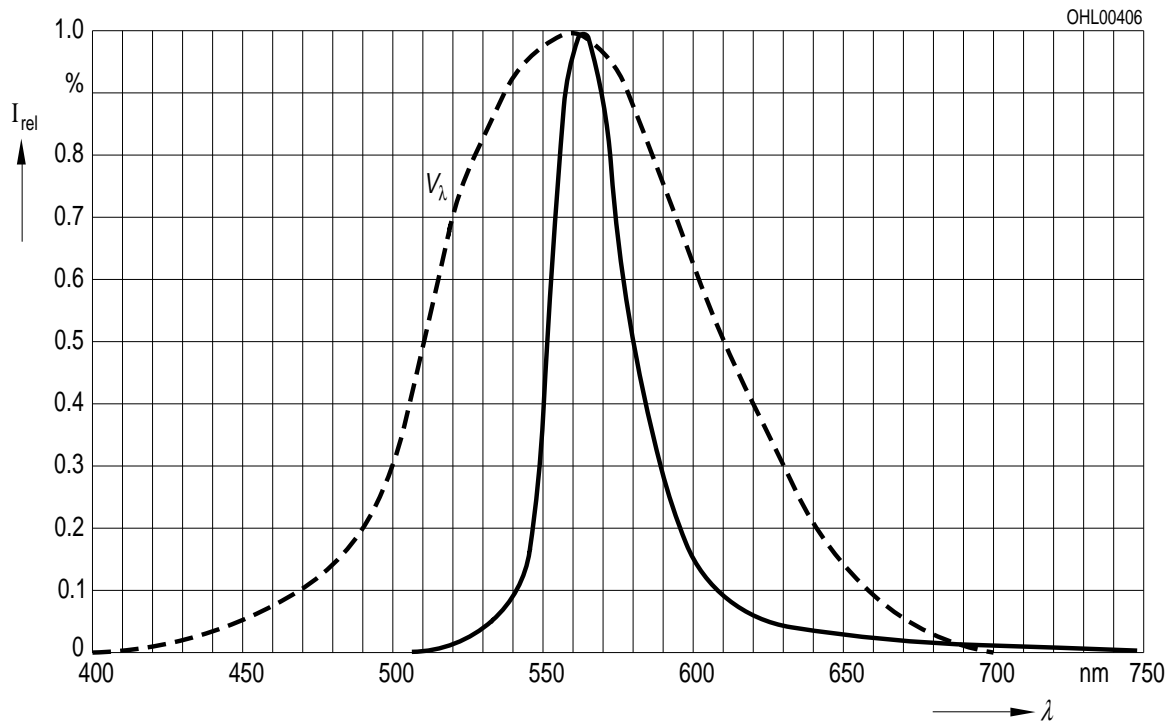
Characteristics

Bezeichnung Parameter	Symbol Symbol	Werte Values	Einheit Unit
Wellenlänge des emittierten Lichtes (typ.) Wavelength at peak emission (typ.) $I_F = 20\text{ mA}$	λ_{peak}	565	nm
Dominantwellenlänge (typ.) Dominant wavelength (typ.) $I_F = 20\text{ mA}$	λ_{dom}	570	nm
Spektrale Bandbreite (typ.) Spectral bandwidth (typ.) $I_F = 20\text{ mA}$	$\Delta\lambda$	26	nm
Abstrahlwinkel bei 50 % I_V (Vollwinkel) Viewing angle at 50 % I_V	2φ	160	Grad deg.
Durchlaßspannung (typ.) Forward voltage (max.) $I_F = 20\text{ mA}$	V_F V_F	2.3 2.6	V V
Sperrstrom (typ.) Reverse current (max.) $V_R = 5\text{ V}$	I_R I_R	0.01 10	μA μA
Temperaturkoeffizient von λ_{dom} ($I_F = 20\text{ mA}$) Temperature coefficient of λ_{dom} ($I_F = 20\text{ mA}$)	TC_λ	0.06	nm/K
Temperaturkoeffizient von λ_{peak} , $I_F = 20\text{ mA}$ (typ.) Temperature coefficient of λ_{peak} , $I_F = 20\text{ mA}$ (typ.)	TC_λ	0.10	nm/K
Temperaturkoeffizient von $\Delta\lambda$ ($I_F = 20\text{ mA}$) Temperature coefficient of $\Delta\lambda$ ($I_F = 20\text{ mA}$)	TC_λ	0.03	nm/K
Temperaturkoeffizient von V_F , $I_F = 20\text{ mA}$ (typ.) Temperature coefficient of V_F , $I_F = 20\text{ mA}$ (typ.)	TC_V	- 1.3	mV/K
Temperaturkoeffizient von I_V , $I_F = 20\text{ mA}$ (typ.) Temperature coefficient of I_V , $I_F = 20\text{ mA}$ (typ.)	TC_{I_V}	- 0.3	%/K

Relative spektrale Emission $I_{rel} = f(\lambda)$, $T_A = 25\text{ °C}$, $I_F = 20\text{ mA}$

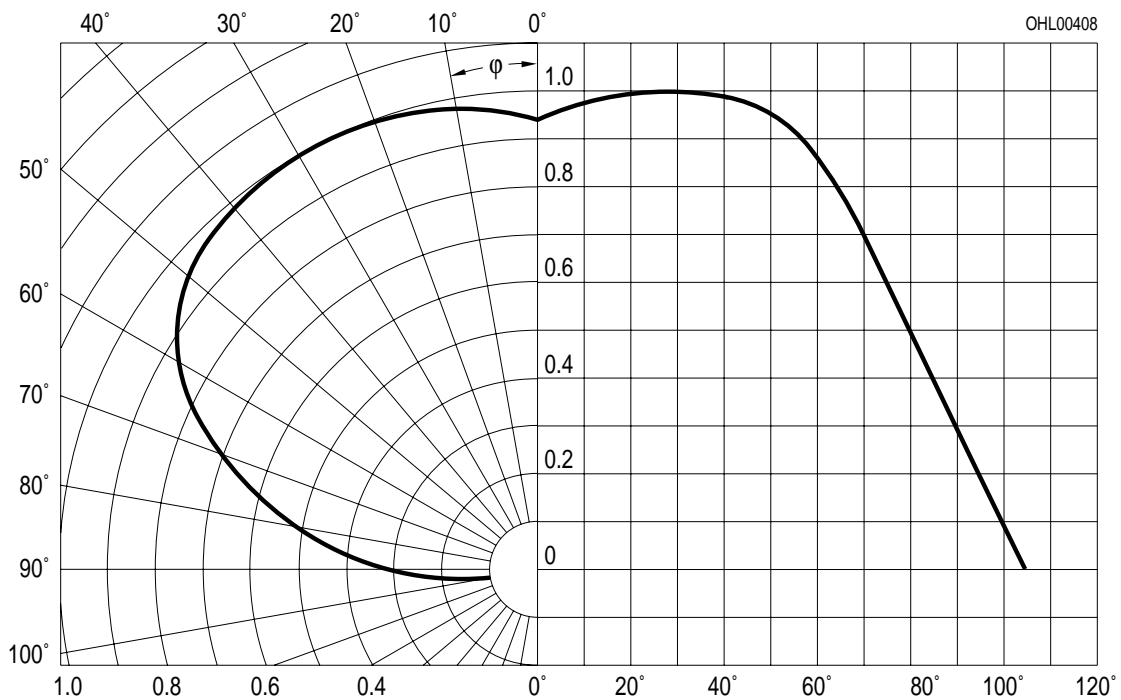
Relative spectral emission

$V(\lambda)$ = spektrale Augenempfindlichkeit
Standard eye response curve



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

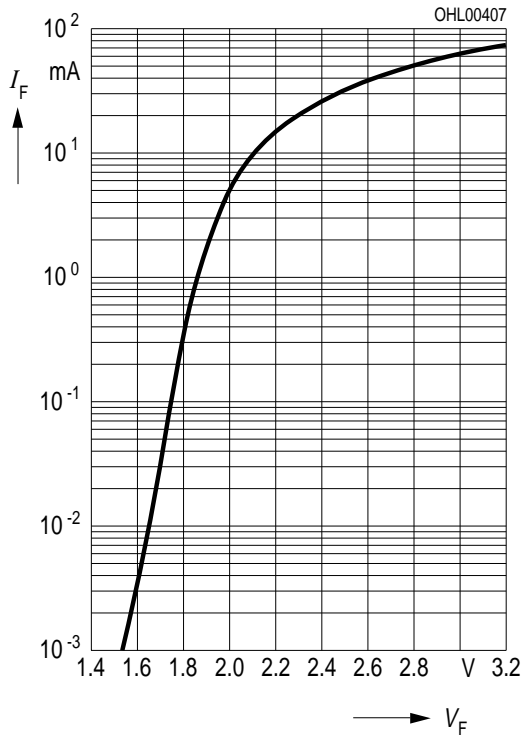
Radiation characteristic



Durchlaßstrom $I_F = f(V_F)$

Forward current

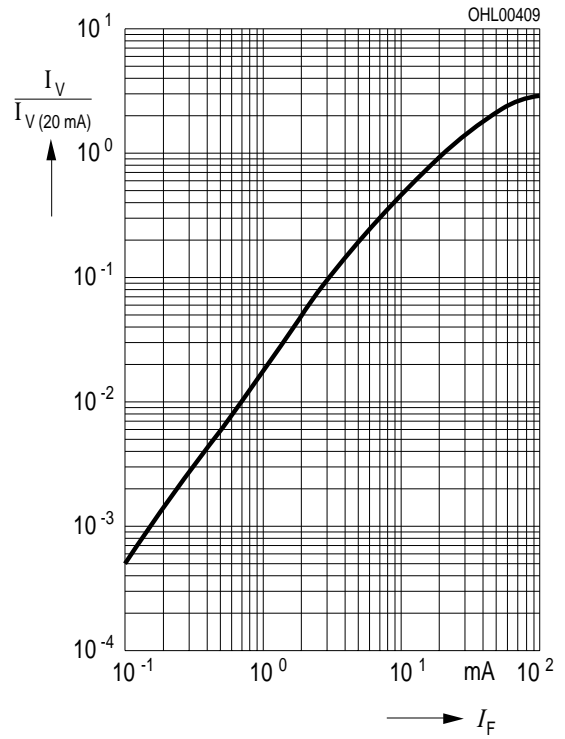
$T_A = 25\text{ °C}$



Relative Lichtstärke $I_V/I_{V(20\text{ mA})} = f(I_F)$

Relative luminous intensity

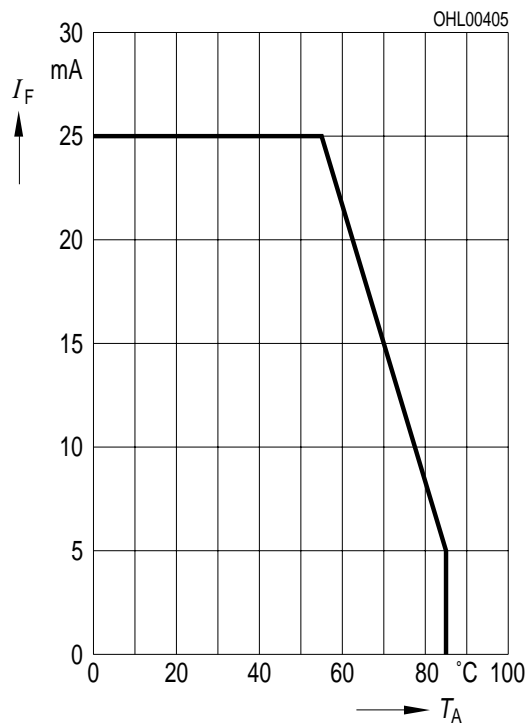
$T_A = 25\text{ °C}$



Maximal zulässiger Durchlaßstrom

Max. permissible forward current

$I_F = f(T_A)$



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

