

5 mm (T1 3/4) LED, Diffused

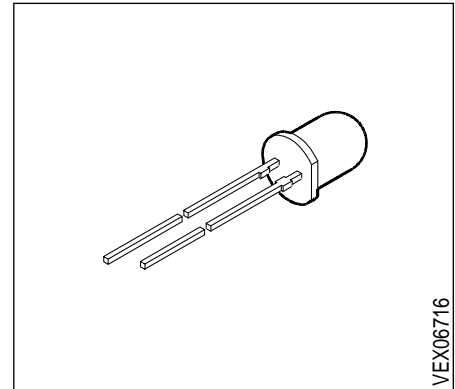
LR 5360, LS 5360, LY 5360  
LG 5360

## Besondere Merkmale

- eingefärbtes, diffuses Gehäuse
- als optischer Indikator einsetzbar
- Lötspieße ohne Aufsetzebene
- gegurtet lieferbar
- Störimpulsfest nach DIN 40839

## Features

- colored, diffused package
- for use as optical indicator
- solder leads without stand-off
- available taped on reel
- load dump resistance acc. to DIN 40839



Typ Type	Emissionsfarbe Color of Emission	Gehäusefarbe Color of Package	Lichtstärke Luminous Intensity $I_F = 10 \text{ mA}$ $I_V \text{ (mcd)}$	Bestellnummer Ordering Code
LR 5360-DG LR 5360-F LR 5360-G LR 5360-FJ	red	red diffused	0.4 ... 3.2 1.0 ... 2.0 1.6 ... 3.2 1.0 ... 8.0	Q62703-Q1376 Q62703-Q1377 Q62703-Q1378 Q62703-Q1379
LS 5360-HL LS 5360-J LS 5360-K LS 5360-L LS 5360-JM	super-red	red diffused	2.5 ... 20.0 4.0 ... 8.0 6.3 ... 12.5 10.0 ... 20.0 4.0 ... 32.0	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	yellow diffused	2.5 ... 20.0 4.0 ... 8.0 6.3 ... 12.5 10.0 ... 20.0 4.0 ... 32.0	Q62703-Q2000 Q62703-Q1386 Q62703-Q2001 Q62703-Q2404 Q62703-Q1387
LG 5360-GK LG 5360-H LG 5360-J LG 5360-K LG 5360-HL	green	green diffused	1.6 ... 12.5 2.5 ... 5.0 4.0 ... 8.0 6.3 ... 12.5 2.5 ... 20.0	Q62703-Q1391 Q62703-Q1390 Q62703-Q1866 Q62703-Q2012 Q62703-Q3188

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
		LR	LS, LY, LG	
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	$I_F$	45	40	mA
Stoßstrom Surge current $t \leq 10 \mu s, D = 0.005$	$I_{FM}$	0.5		A
Sperrspannung Reverse voltage	$V_R$	5		V
Verlustleistung Power dissipation $T_A \leq 25 \text{ °C}$	$P_{tot}$	100	140	mW
Wärmewiderstand Thermal resistance Sperrschicht / Luft Junction / air	$R_{th JA}$	400		K/W

## Kennwerte ( $T_A = 25\text{ °C}$ )

### Characteristics

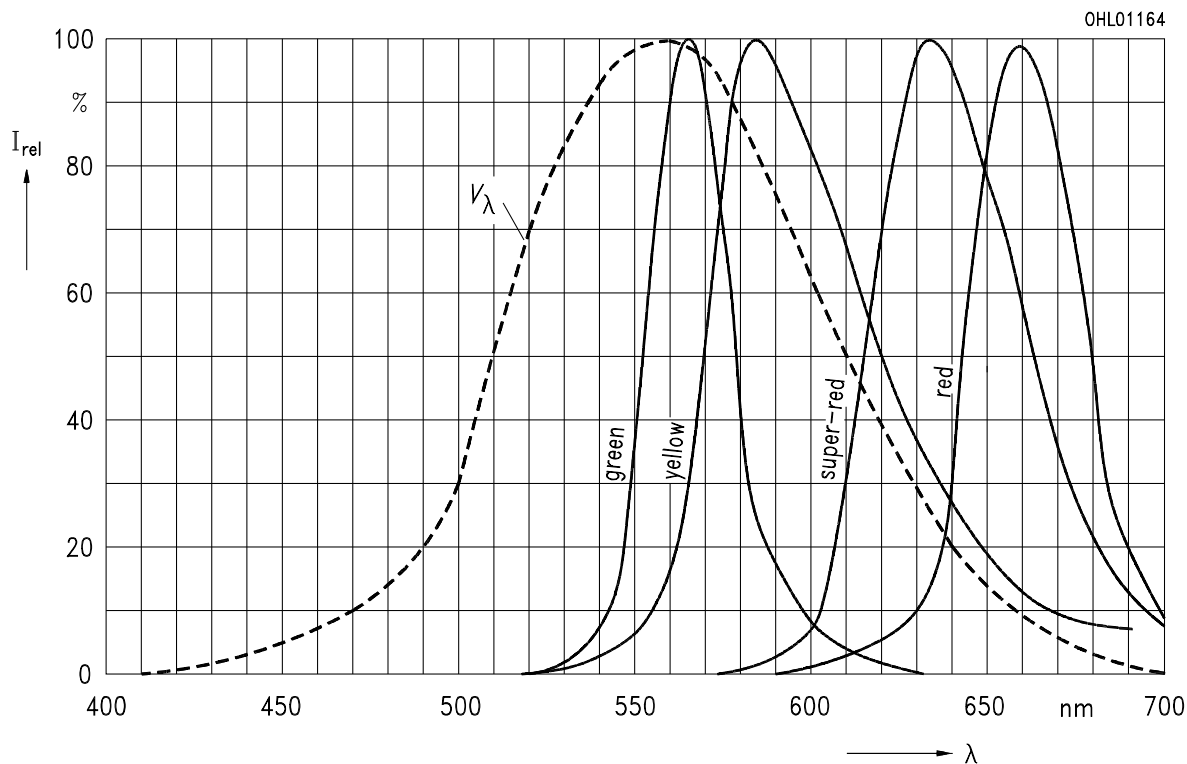
Bezeichnung Parameter	Symbol Symbol	Werte Values				Einheit Unit
		LR	LS	LY	LG	
Wellenlänge des emittierten Lichtes Wavelength at peak emission $I_F = 20\text{ mA}$	(typ.) $\lambda_{\text{peak}}$ (typ.)	660	635	586	565	nm
Dominantwellenlänge Dominant wavelength $I_F = 20\text{ mA}$	(typ.) $\lambda_{\text{dom}}$ (typ.)	645	628	590	570	nm
Spektrale Bandbreite bei 50 % $I_{\text{rel max}}$ Spectral bandwidth at 50 % $I_{\text{rel max}}$ $I_F = 20\text{ mA}$	(typ.) $\Delta\lambda$ (typ.)	35	45	45	25	nm
Abstrahlwinkel bei 50 % $I_V$ (Vollwinkel) Viewing angle at 50 % $I_V$	$2\phi$	50	50	50	50	deg.
Durchlaßspannung Forward voltage $I_F = 10\text{ mA}$	(typ.) $V_F$ (max.) $V_F$	1.6 2.0	2.0 2.6	2.0 2.6	2.0 2.6	V V
Sperrstrom Reverse current $V_R = 5\text{ V}$	(typ.) $I_R$ (max.) $I_R$	0.01 10	0.01 10	0.01 10	0.01 10	$\mu\text{A}$ $\mu\text{A}$
Kapazität Capacitance $V_R = 0\text{ V}, f = 1\text{ MHz}$	(typ.) $C_0$	25	12	10	15	pF
Schaltzeiten: Switching times: $I_V$ from 10 % to 90 % $I_V$ from 90 % to 10 % $I_F = 100\text{ mA}, t_p = 10\text{ }\mu\text{s}, R_L = 50\text{ }\Omega$	(typ.) $t_r$ (typ.) $t_f$	120 50	300 150	300 150	450 200	ns ns

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

Relative spectral emission

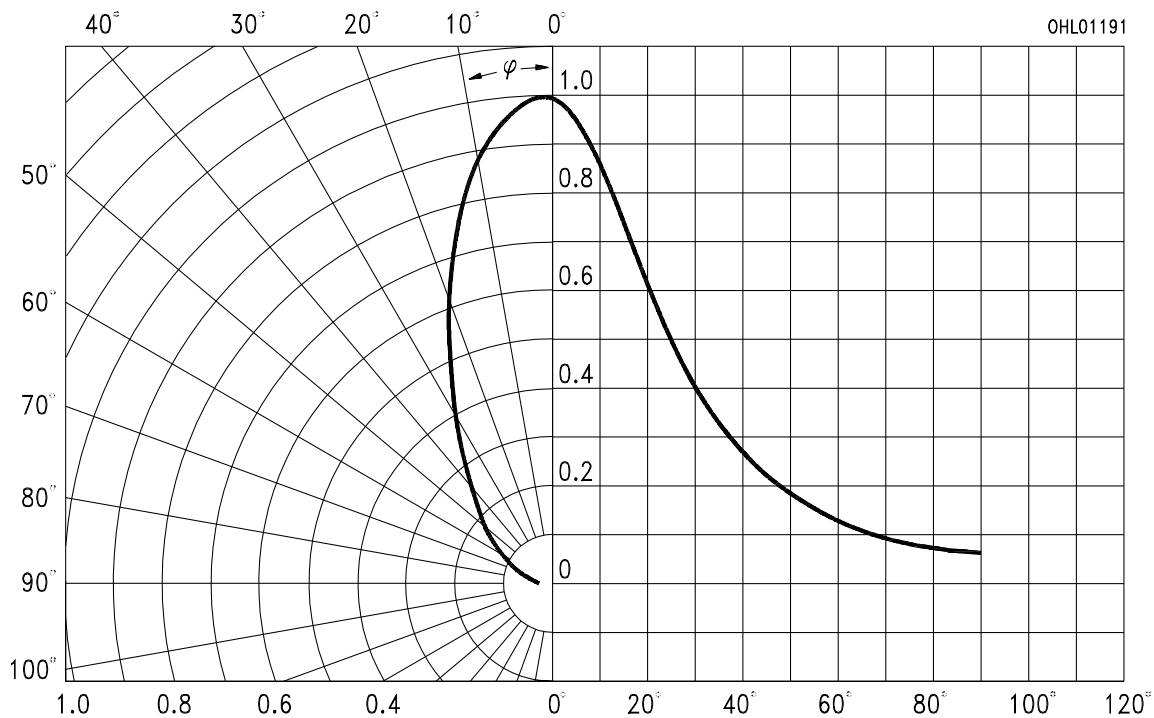
$V(\lambda)$  = spektrale Augenempfindlichkeit

Standard eye response curve



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

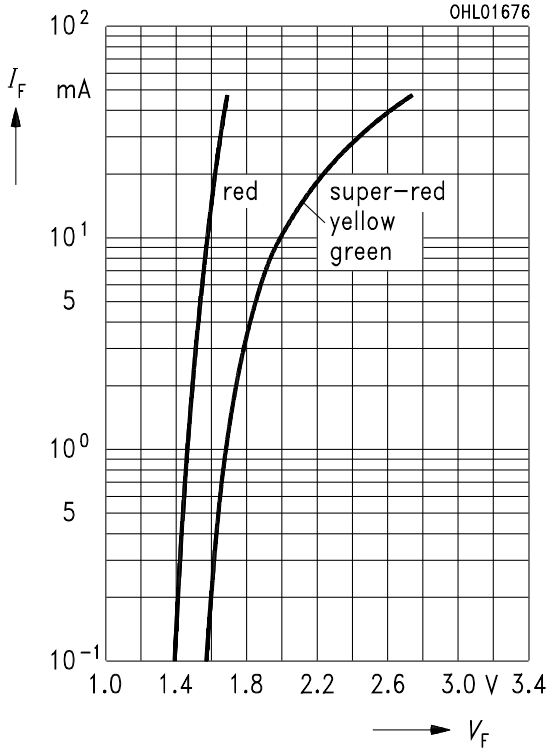
Radiation characteristic



**Durchlaßstrom  $I_F = f(V_F)$**

**Forward current**

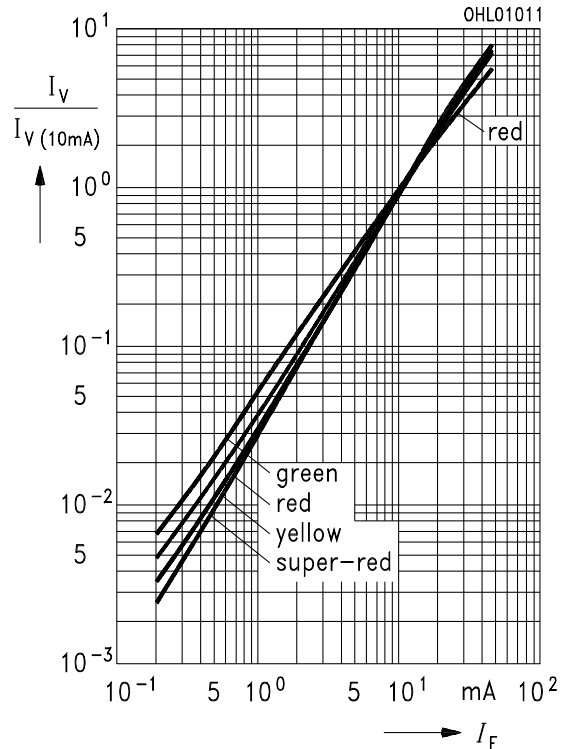
$T_A = 25\text{ °C}$



**Relative Lichtstärke  $I_V/I_{V(10\text{ mA})} = f(I_F)$**

**Relative luminous intensity**

$T_A = 25\text{ °C}$

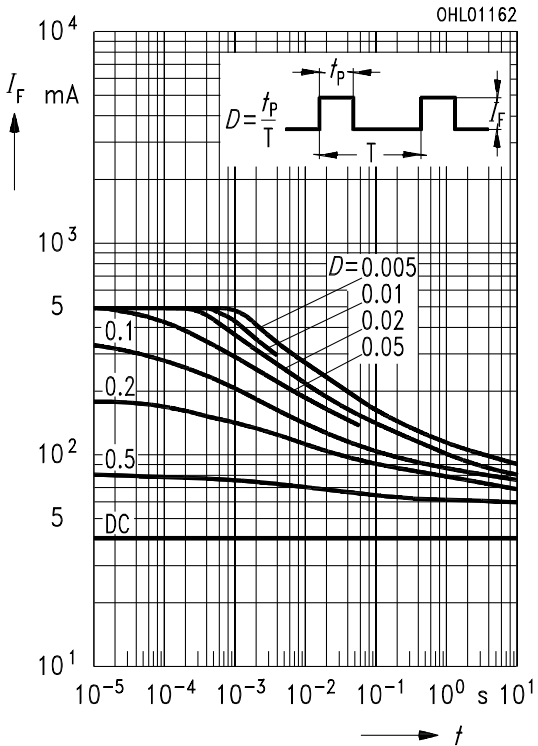


**Zulässige Impulsbelastbarkeit  $I_F = f(t_p)$**

**Permissible pulse handling capability**

Duty cycle  $D =$  parameter,  $T_A = 25\text{ °C}$

**LS, LY, LG**

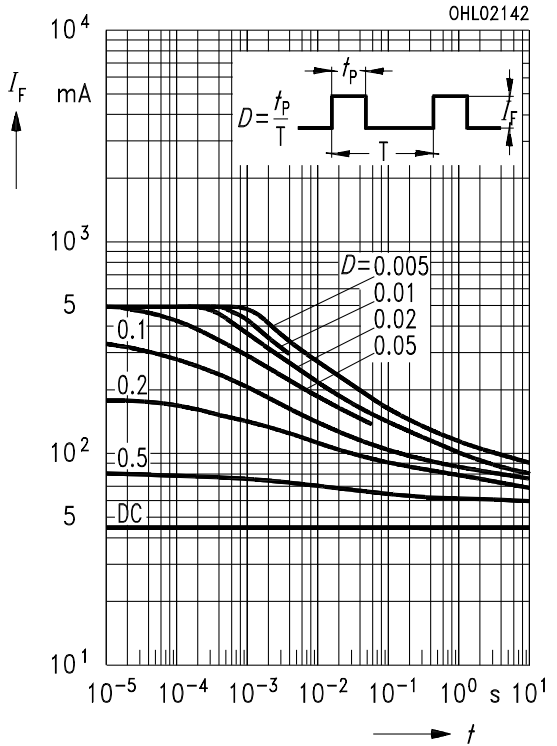


**Zulässige Impulsbelastbarkeit  $I_F = f(t_p)$**

**Permissible pulse handling capability**

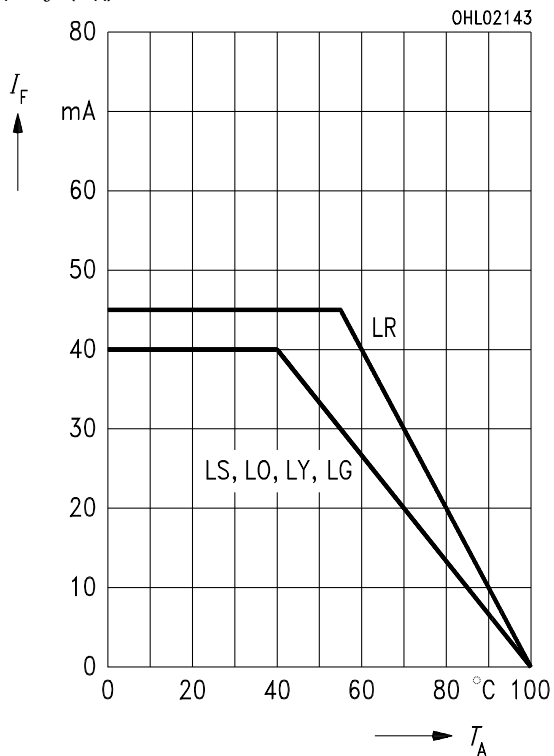
Duty cycle  $D =$  parameter,  $T_A = 25\text{ °C}$

**LR**



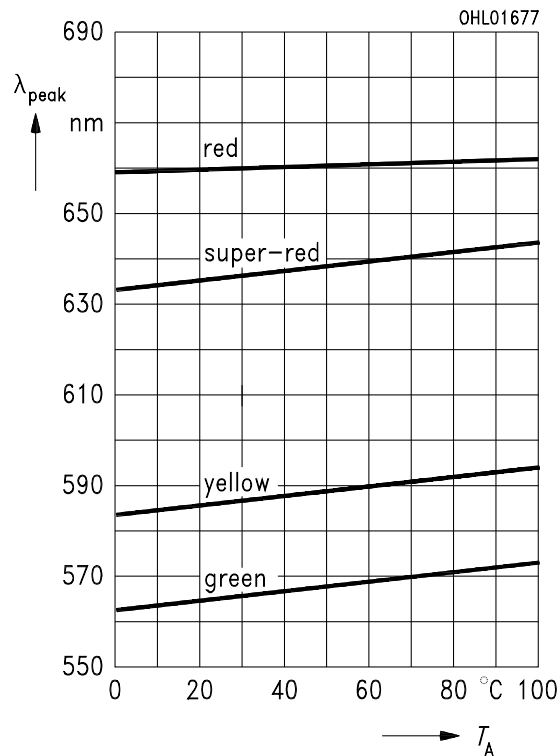
### Maximal zulässiger Durchlaßstrom Max. permissible forward current

$$I_F = f(T_A)$$



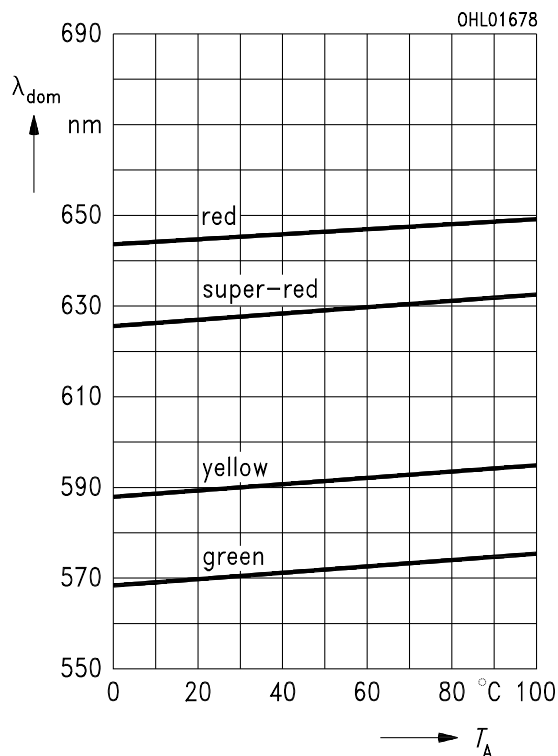
### Wellenlänge der Strahlung $\lambda_{\text{peak}} = f(T_A)$ Wavelength at peak emission

$$I_F = 20 \text{ mA}$$



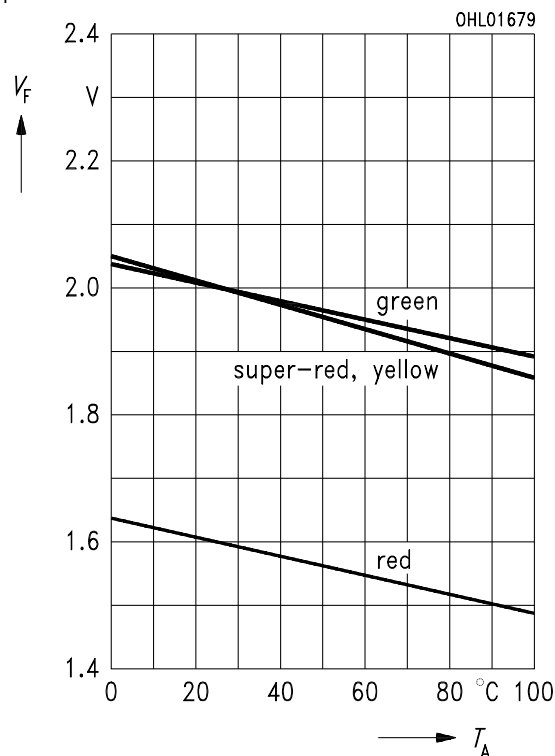
### Dominantwellenlänge $\lambda_{\text{dom}} = f(T_A)$ Dominant wavelength

$$I_F = 20 \text{ mA}$$



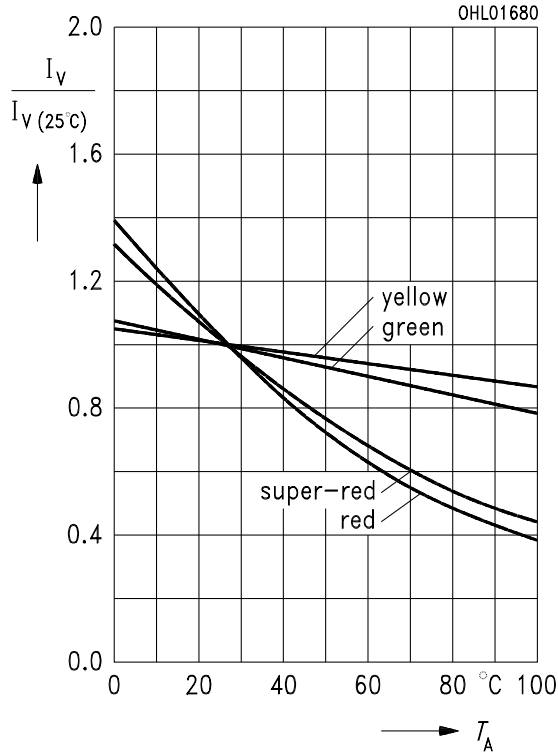
### Durchlaßspannung $V_F = f(T_A)$ Forward voltage

$$I_F = 10 \text{ mA}$$

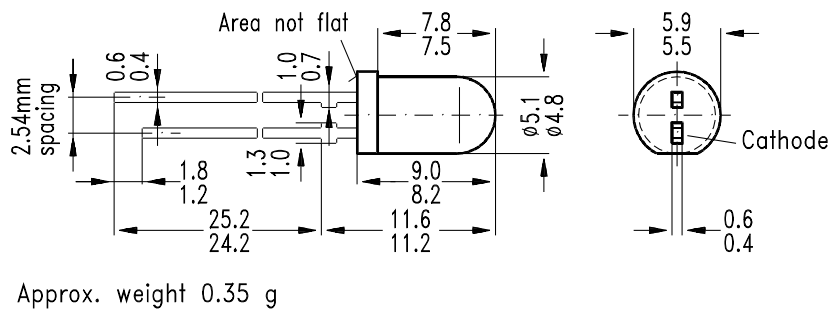


Relative Lichtstärke  $I_V/I_{V(25^\circ\text{C})} = f(T_A)$   
Relative luminous intensity

$I_F = 10 \text{ mA}$



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



GEX06716

**Kathodenkennzeichnung:** Kürzerer Lötspieß  
**Cathode mark:** Short solder lead