

SIEMENS

3 mm (T1) LED, Non Diffused Super-Bright LED

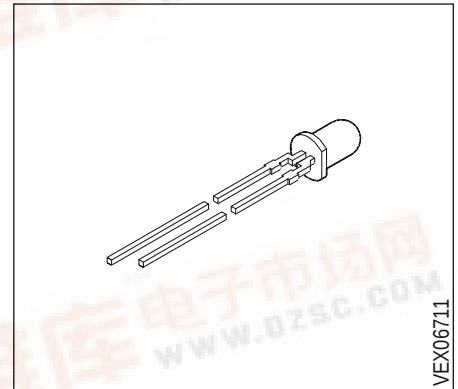
LS 3341, LY 3341, LG 3341
LP 3341

Besondere Merkmale

- eingefärbtes, klares Gehäuse
- hohe Lichtstärke
- zur Einkopplung in Lichtleiter
- Lötspieße mit Aufsetzebene
- gegurtet lieferbar
- Störimpulsfest nach DIN 40839

Features

- colored, clear package
- high luminous intensity
- optical coupling into light pipes
- solder leads with stand-off
- available taped on reel
- load dump resistant 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
LS 3341-LP LS 3341-M LS 3341-N LS 3341-P LS 3341-MQ	super-red	red clear	10.0 ... 80.0 16.0 ... 32.0 25.0 ... 50.0 40.0 ... 80.0 16.0 ... 125.0	Q62703-Q3911 Q62703-Q2146 Q62703-Q2147 Q62703-Q3445 Q62703-Q2148
LY 3341-LP LY 3341-M LY 3341-N LY 3341-P LY 3341-MQ	yellow	yellow clear	10.0 ... 80.0 16.0 ... 32.0 25.0 ... 50.0 40.0 ... 80.0 16.0 ... 125.0	Q62703-Q2152 Q62703-Q2151 Q62703-Q2398 Q62703-Q3234 Q62703-Q2149
LG 3341-KN LG 3341-M LG 3341-N LG 3341-MQ	green	green clear	6.3 ... 50.0 16.0 ... 32.0 25.0 ... 50.0 16.0 ... 125.0	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	green clear	4.0 ... 32.0 6.3 ... 12.5 10.0 ... 20.0 16.0 ... 32.0 6.3 ... 50.0	Q62703-Q3815 Q62703-Q3816 Q62703-Q2986 Q62703-Q2919 Q62703-Q2750

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
		LS, LY, LG	LP	
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	40	30	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 $T_A \leq 25^\circ C$	P_{tot}	140	100	mW
Wärmewiderstand Thermal resistance Sperrschicht / Luft Junction / air	$R_{th JA}$	400		K/W

Kennwerte ($T_A = 25\text{ °C}$)

Characteristics

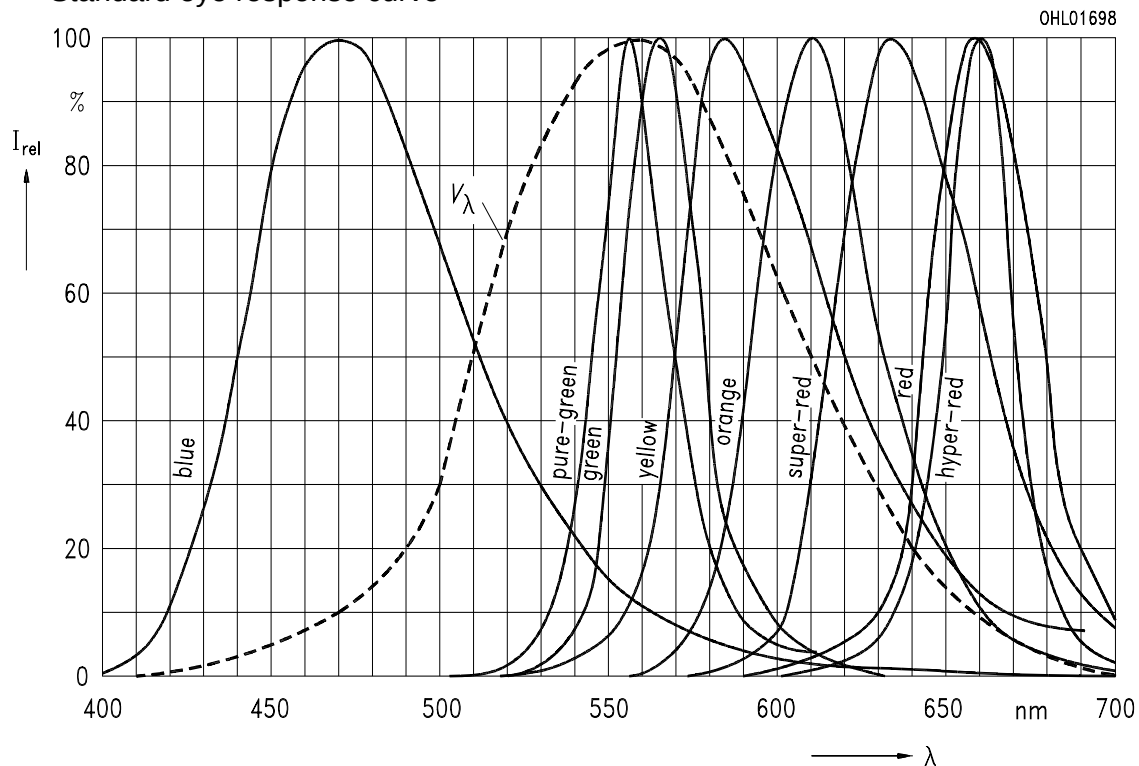
Bezeichnung Parameter	Symbol Symbol	Werte Values				Einheit Unit
		LS	LY	LG	LP	
Wellenlänge des emittierten Lichtes (typ.) Wavelength at peak emission (typ.) $I_F = 20\text{ mA}$	λ_{peak}	635	586	565	557	nm
Dominantwellenlänge (typ.) Dominant wavelength (typ.) $I_F = 20\text{ mA}$	λ_{dom}	628	590	570	560	nm
Spektrale Bandbreite bei 50 % $I_{\text{rel max}}$ (typ.) Spectral bandwidth at 50 % $I_{\text{rel max}}$ (typ.) $I_F = 20\text{ mA}$	$\Delta\lambda$	45	45	25	22	nm
Abstrahlwinkel bei 50 % I_V (Vollwinkel) Viewing angle at 50 % I_V	2ϕ	40	40	40	40	Grad deg.
Durchlaßspannung (typ.) Forward voltage (max.) $I_F = 10\text{ mA}$	V_F V_F	2.0 2.6	2.0 2.6	2.0 2.6	2.0 2.6	V V
Sperrstrom (typ.) Reverse current (max.) $V_R = 5\text{ V}$	I_R I_R	0.01 10	0.01 10	0.01 10	0.01 10	μA μA
Kapazität (typ.) Capacitance $V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_0	12	10	15	15	pF
Schaltzeiten: Switching times: I_V from 10 % to 90 % (typ.) I_V from 90 % to 10 % (typ.) $I_F = 100\text{ mA}$, $t_p = 10\text{ }\mu\text{s}$, $R_L = 50\text{ }\Omega$	t_r t_f	300 150	300 150	450 200	450 200	ns ns

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

Relative spectral emission

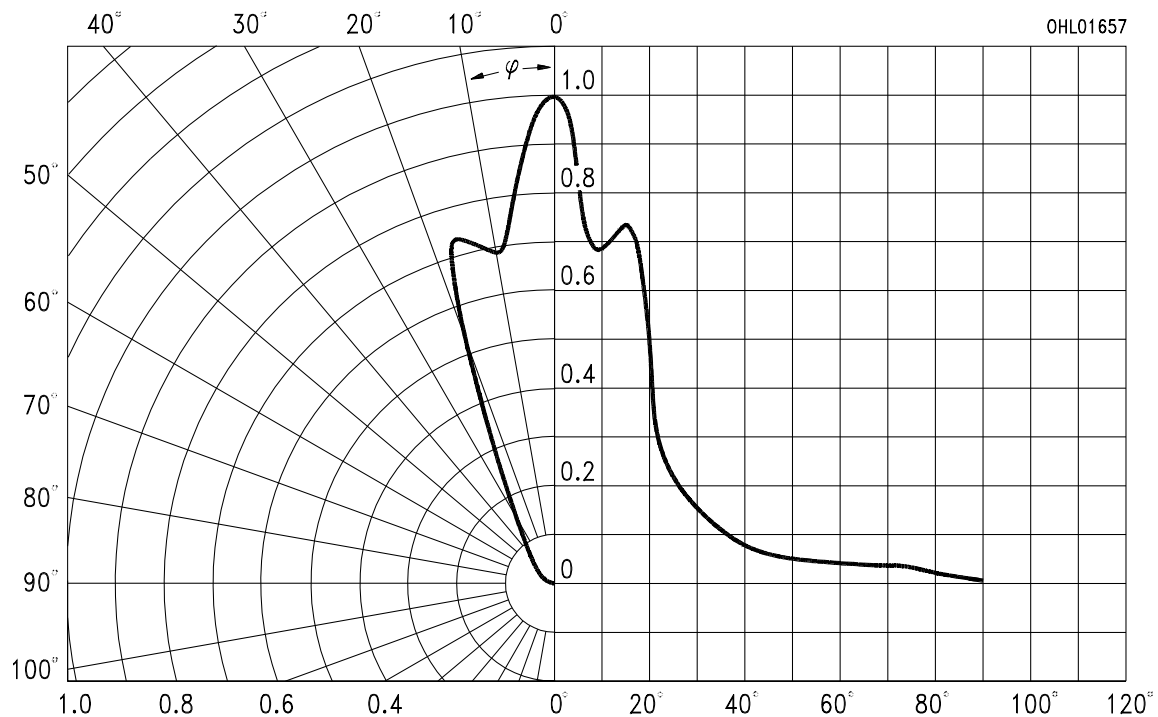
$V(\lambda)$ = spektrale Augenempfindlichkeit

Standard eye response curve



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

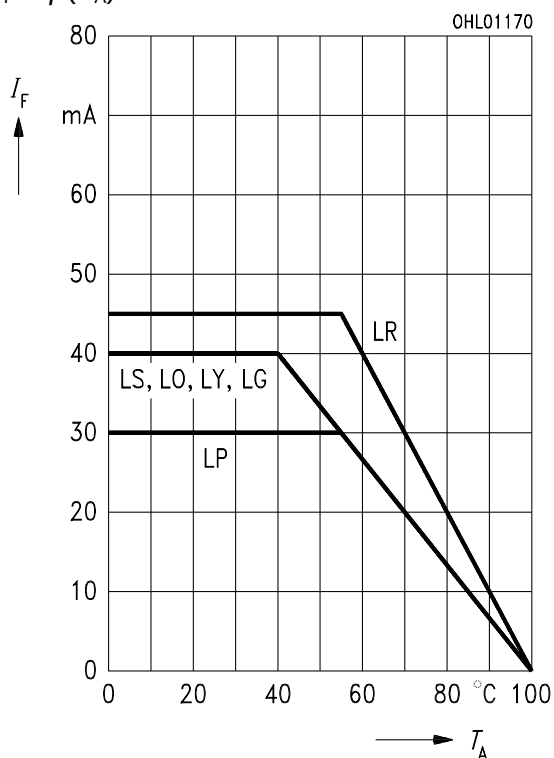
Radiation characteristic



Maximal zulässiger Durchlaßstrom

Max. permissible forward current

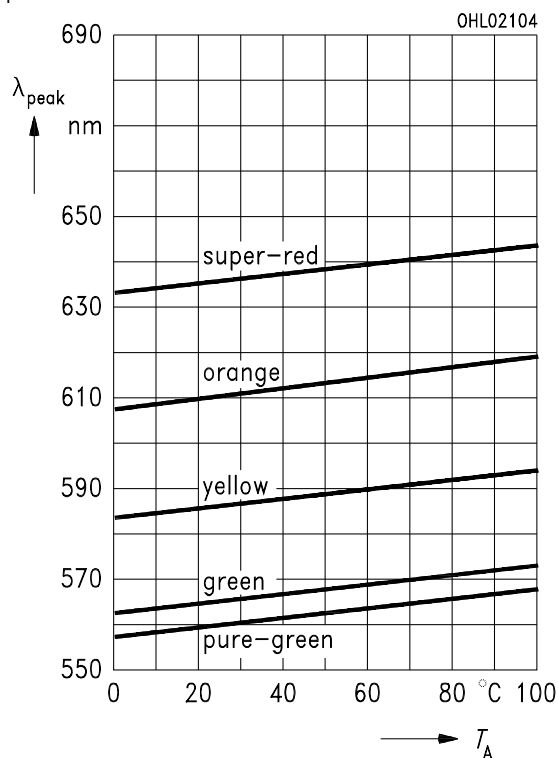
$$I_F = f(T_A)$$



Wellenlänge der Strahlung $\lambda_{\text{peak}} = f(T_A)$

Wavelength at peak emission

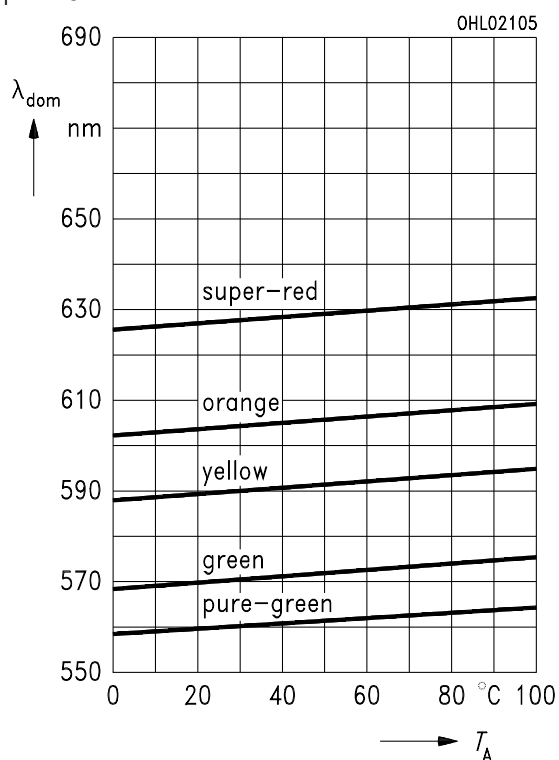
$$I_F = 20 \text{ mA}$$



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

Dominant wavelength

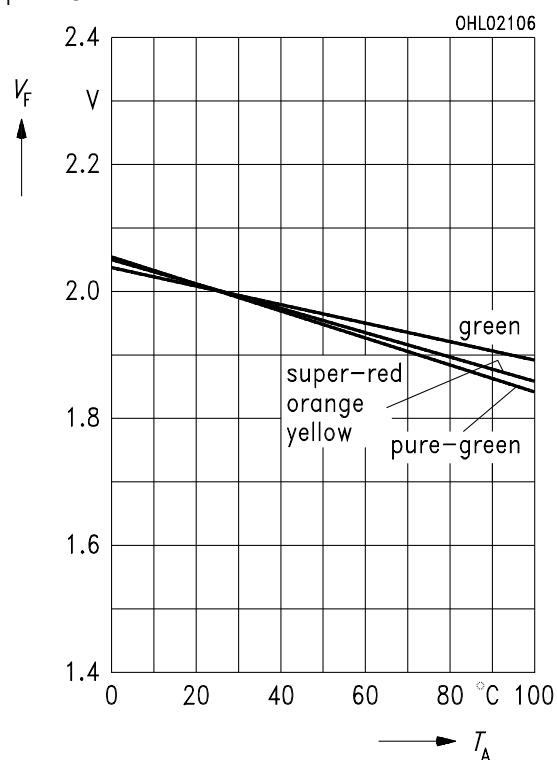
$$I_F = 20 \text{ mA}$$



Durchlaßspannung $V_F = f(T_A)$

Forward voltage

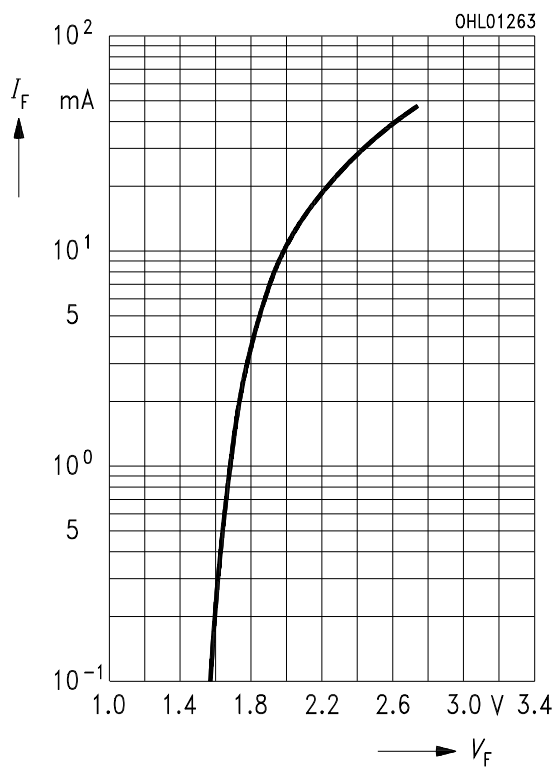
$$I_F = 10 \text{ mA}$$



Durchlaßstrom $I_F = f(V_F)$

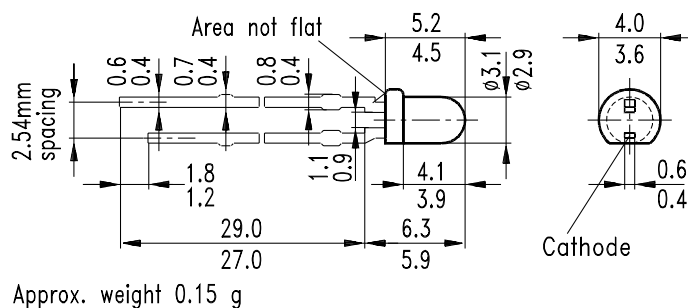
Forward current

$T_A = 25^\circ\text{C}$



Maßzeichnung
Package Outlines

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



GEX06711

Kathodenkennzeichnung: Kürzerer Lötspieß

Cathode mark: Short solder lead