

# SIEMENS

## Multi TOPLED® Bright Green Die

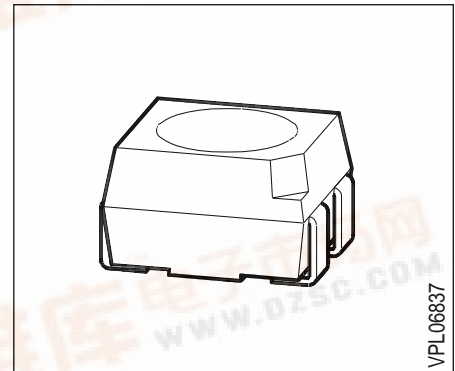
## LOG T671, LSG T671

### Besondere Merkmale

- Gehäusebauform: P-LCC-4
- Gehäusefarbe: weiß
- als optischer Indikator einsetzbar
- zur Hinterleuchtung, Lichtleiter- und Linseneinkopplung
- für alle SMT-Bestück- und Löttechniken geeignet
- gegurtet (8-mm-Filmgurt)
- Störimpulsfest nach DIN 40839

### Features

- P-LCC-4 package
- 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	Emissionsfarbe	Farbe der Lichtaustrittsfläche	Lichtstärke	Lichtstrom	Bestellnummer
Type	Color of Emission	Color of the Light Emitting Area	Luminous Intensity $I_F = 10 \text{ mA}$ $I_V \text{ (mcd)}$	Luminous Flux $I_F = 10 \text{ mA}$ $\Phi_V \text{ (lm)}$	Ordering Code
LOG T671-HO	orange/ green	colorless clear	$\geq 2.5$ (8.0 typ.)	24 (typ.)	Q62703-Q3632
LOG T671-LO			$\geq 10.0$ (15.0 typ.)	45 (typ.)	Q62703-Q3633
LSG T671-HK	super-red/ green	colorless clear	2.5 ... 12.5	-	Q62703-Q3154
LSG T671-J			4.0 ... 8.0	18 (typ.)	Q62703-Q3156
LSG T671-K			6.3 ... 12.5	30 (typ.)	Q62703-Q3157
LSG T671-JL			6.3 ... 20.0	-	Q62703-Q3155

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

## 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 $t \leq 10 \mu s, D = 0.005$	$I_{FM}$	0.5	A
Sperrspannung Reverse voltage	$V_R$	5	V
Verlustleistung Power dissipation	$P_{tot}$	100	mW
Wärmewiderstand Thermal resistance Sperrschicht / Umgebung Junction / air Montage auf PC-board*) (Padgröße $\geq 16 \text{ mm}^2$ ) mounted on PC board*) (pad size $\geq 16 \text{ mm}^2$ )	$R_{th JA}$	400	K/W

\*) PC-board: FR4

## Kennwerte ( $T_A = 25\text{ °C}$ )

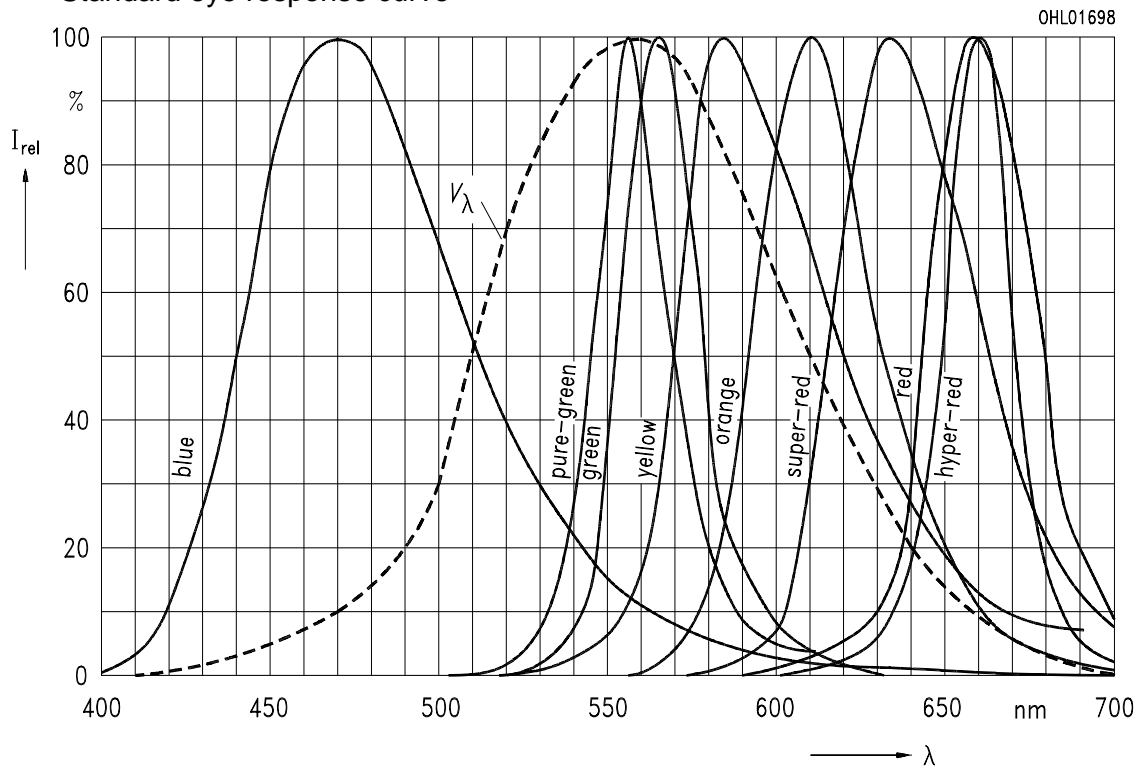
### Characteristics

Bezeichnung Parameter	Symbol Symbol	Werte Values					Einheit Unit
		LS	LO	LY	LG	LP	
Wellenlänge des emittierten Lichtes Wavelength at peak emission $I_F = 10\text{ mA}$	(typ.) $\lambda_{\text{peak}}$ (typ.)	635	610	586	565	557	nm
Dominantwellenlänge Dominant wavelength $I_F = 10\text{ mA}$	(typ.) $\lambda_{\text{dom}}$ (typ.)	628	605	590	570	560	nm
Spektrale Bandbreite bei 50 % $I_{\text{rel max}}$ Spectral bandwidth at 50 % $I_{\text{rel max}}$ $I_F = 10\text{ mA}$	(typ.) $\Delta\lambda$ (typ.)	45	40	45	25	22	nm
Abstrahlwinkel bei 50 % $I_V$ (Vollwinkel) Viewing angle at 50 % $I_V$	$2\phi$	120	120	120	120	120	Grad deg.
Durchlaßspannung Forward voltage $I_F = 10\text{ mA}$	(typ.) $V_F$ (max.) $V_F$	2.0 2.6	2.0 2.6	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	0.01 10	$\mu\text{A}$ $\mu\text{A}$
Kapazität Capacitance $V_R = 0\text{ V}, f = 1\text{ MHz}$	(typ.) $C_0$	12	8	10	15	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.) $t_f$	300 150	300 150	300 150	450 200	450 200	ns ns

**Relative spektrale Emission**  $I_{rel} = f(\lambda)$ ,  $T_A = 25\text{ °C}$ ,  $I_F = 10\text{ mA}$

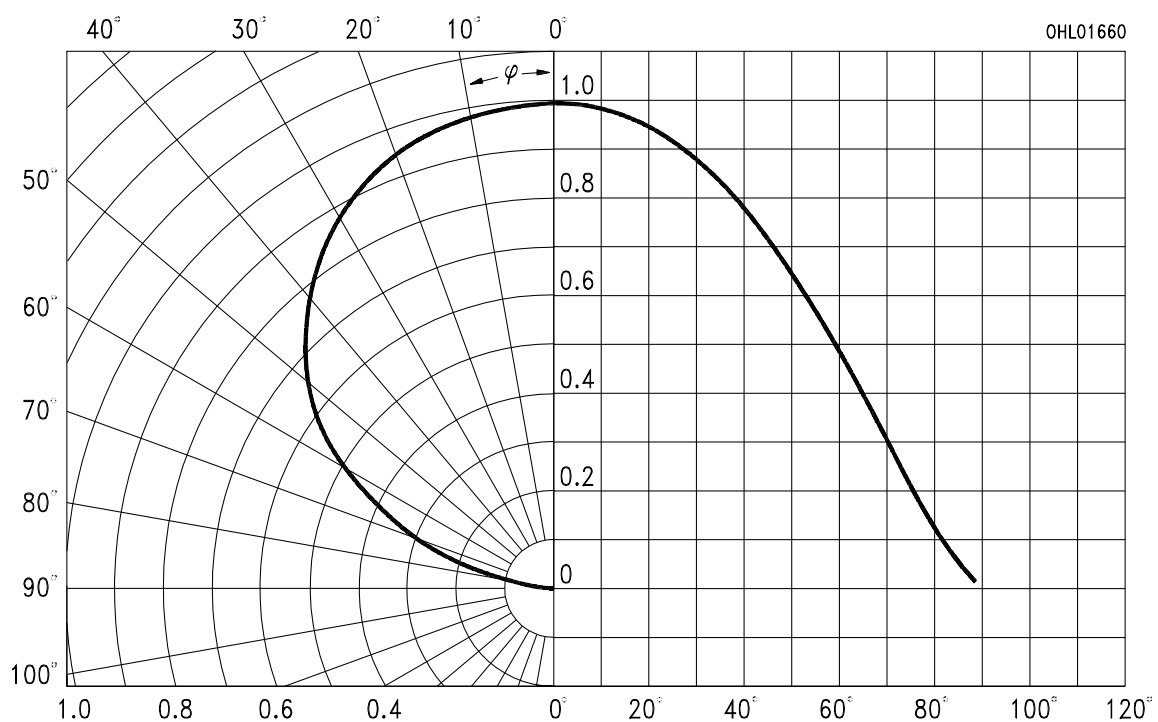
**Relative spectral emission**

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



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

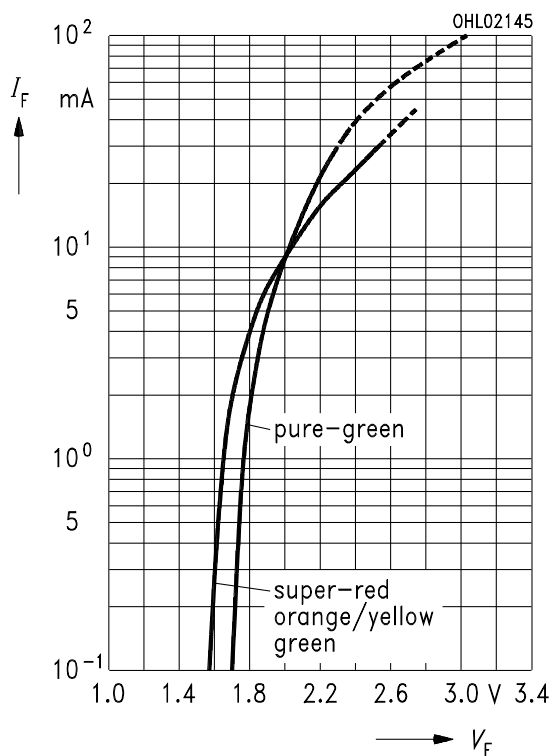
**Radiation characteristic**



### Durchlaßstrom $I_F = f(V_F)$

### Forward current

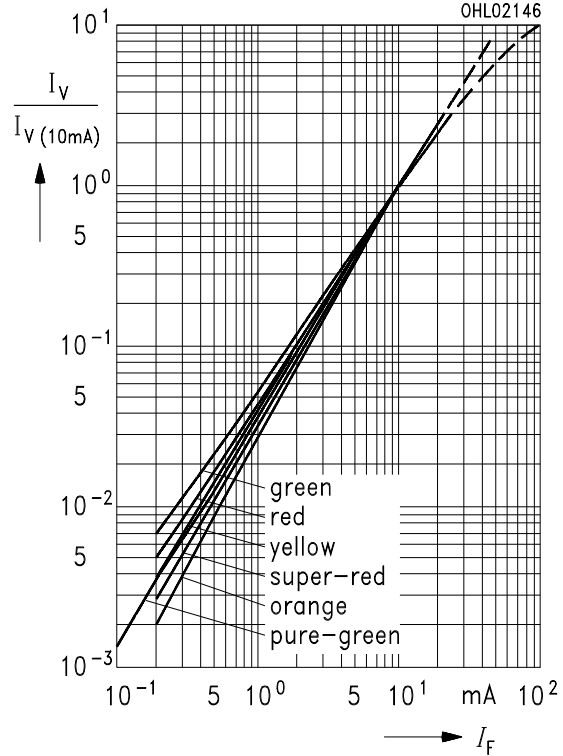
$T_A = 25^\circ\text{C}$



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

### Relative luminous intensity

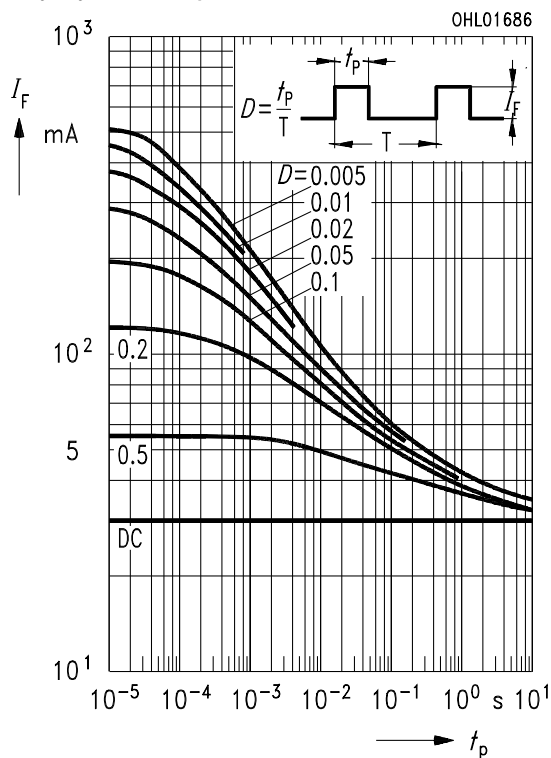
$T_A = 25^\circ\text{C}$



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

### Permissible pulse handling capability

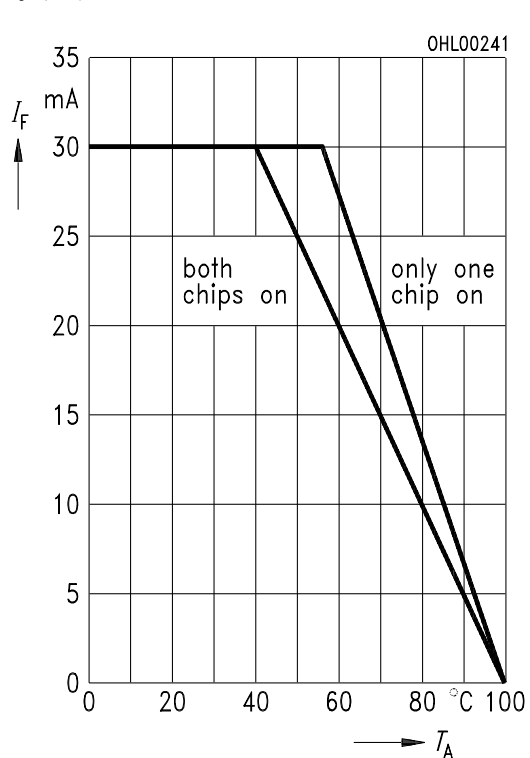
Duty cycle  $D =$  parameter,  $T_A = 25^\circ\text{C}$



### Maximal zulässiger Durchlaßstrom

### Max. permissible forward current

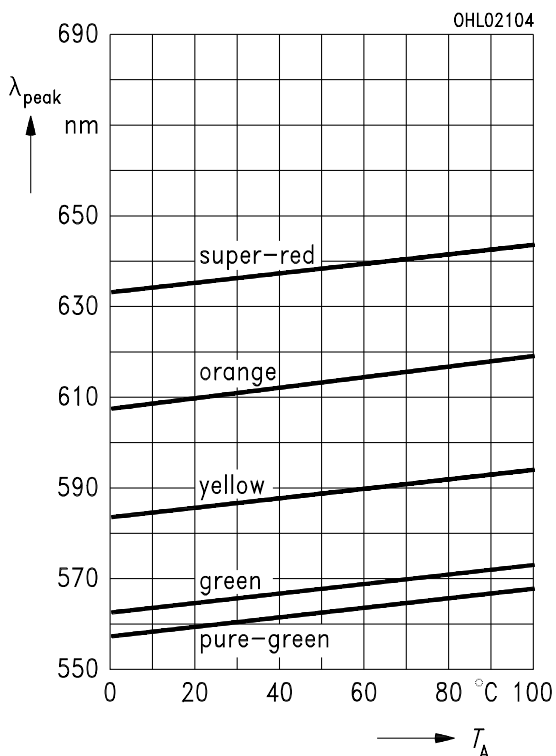
$I_F = f(T_A)$



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

#### Wavelength at peak emission

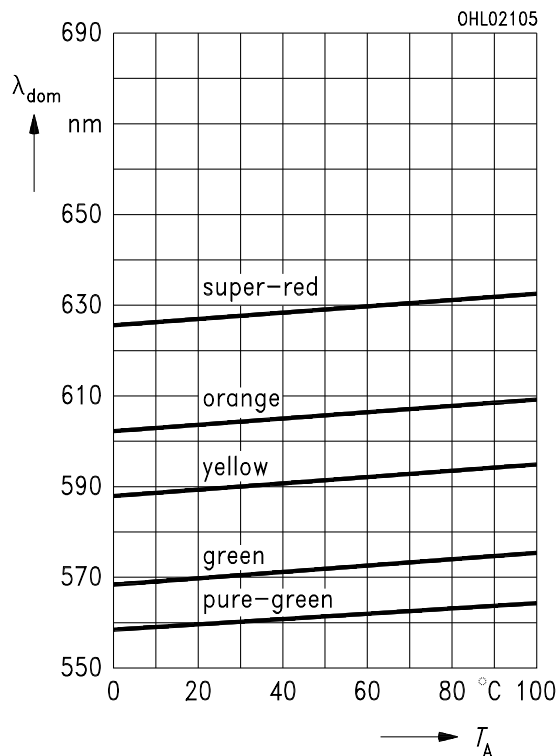
$I_F = 10 \text{ mA}$



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

#### Dominant wavelength

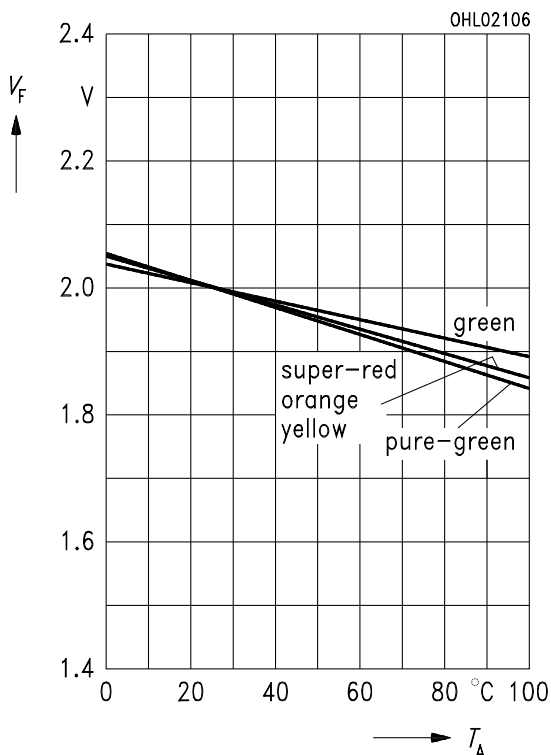
$I_F = 10 \text{ mA}$



### Durchlaßspannung $V_F = f(T_A)$

#### Forward voltage

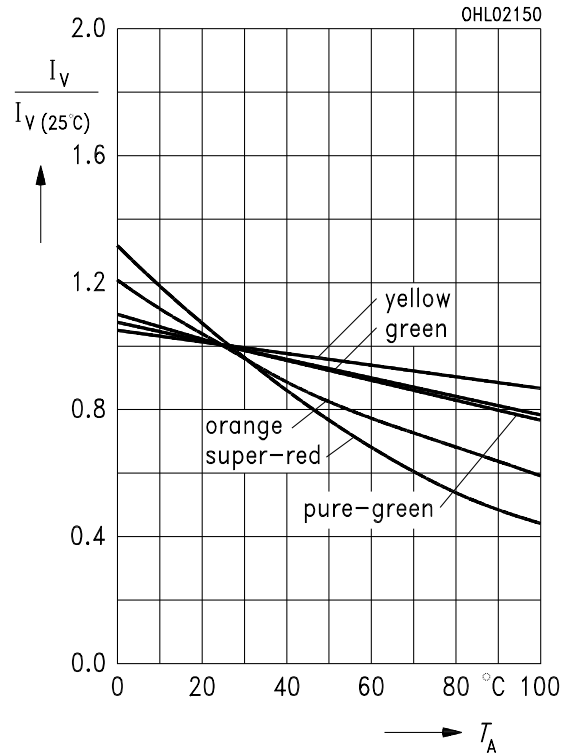
$I_F = 10 \text{ mA}$



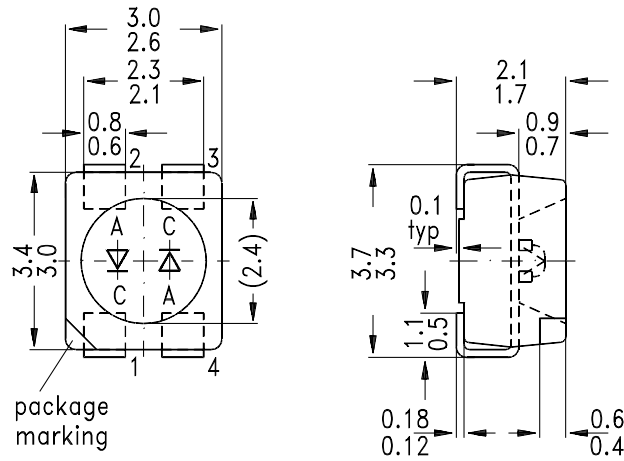
### Relative Lichtstärke $I_V / I_{V(25^\circ\text{C})} = f(T_A)$

#### Relative luminous intensity

$I_F = 10 \text{ mA}$



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



L	S	G	T671
LED	Emission color 1	Emission color 2	Package
	cathode: pin 1	cathode: pin 3	

GPL06837

**Kathodenkennung:** abgeschrägte Ecke  
**Cathode mark:** bevelled edge