

Product Specification**PIN-Photodiode THD****37°****CSR3815TGG**

- * PIN-Photodiode for general purpose
Based on Silicon- Photodiode
- * Short conic package
- * **typ Response Angle of typ. 37°**
- * Daylight filtered black housing
- * Mechanical matched with CQR65 LED-serie

**Optical and Electrical Characteristics @Tambient =25°C**

Symbol	Parameter	MIN	Typ	MAX	UNIT	Test conditions
I_{Light}	Reverse Light Current	30	40		μA	$E_e = 1\text{mW/cm}^2 @940\text{nm}$; $V_r=10\text{V}$
I_{Dark}	Reverse Dark Current			8	nA	$E_e = 0\text{mW/cm}^2$; $V_r=10\text{V}$
I_{short}	Short Circuit Current		7		μA	$E_e = 1\text{mW/cm}^2 @940\text{nm}$
V_{RM}	Reverse Voltage			50	V	
V_{forward}	Reverse Breakdown Voltage	30			V	$I_R = 100\ \mu\text{A}$; $E_e = 0\text{mW/cm}^2$
V_{OC}	Open Circuit Voltage		440		mV	$E_e = 5\text{mW/cm}^2 @900\text{nm}$
λ_{peak}	Wavelength of Peak Sensitivity		900		nm	max. sensitivity
$\lambda_{0,5}$	Range of Spectral Bandwidth	720		1100	nm	$I = 10\%$, typical
t_f	Fall Time		10		μS	$V_{ce} = 5\text{V}$; $I_c = 1\text{mA}$; $R_L = 1\text{K}\Omega$
t_r	Rise Time		10		μS	$V_{ce} = 5\text{V}$; $I_c = 1\text{mA}$; $R_L = 1\text{K}\Omega$
A	Active Array		0,75		mm^2	
$2\Phi_{0,5}$	Full Response Angle	34	37	39	deg.	$\Phi_E = 50\%$
C_J	Junction Capacity		3	8	pF	$V_R = 5\text{V}$; $f = 1\text{MHz}$; $E_e = 0\text{mW/cm}^2$
$T_{\text{Operating}}$	Operating Temperature	-40		85	°C	
T_{Storage}	Storage Temperature	-40		85	°C	
$T_{\text{Soldering}}$	Soldering Temperature			260	°C	Iron Soldering; 5mm from case @ max 5 sec.
R_{thJA}	Thermal Resistance		450		K/W	
P_{tot}	Total Power Dissipation			100	mW	$T_{\text{amb}} 25^\circ\text{C}$

Order informations:

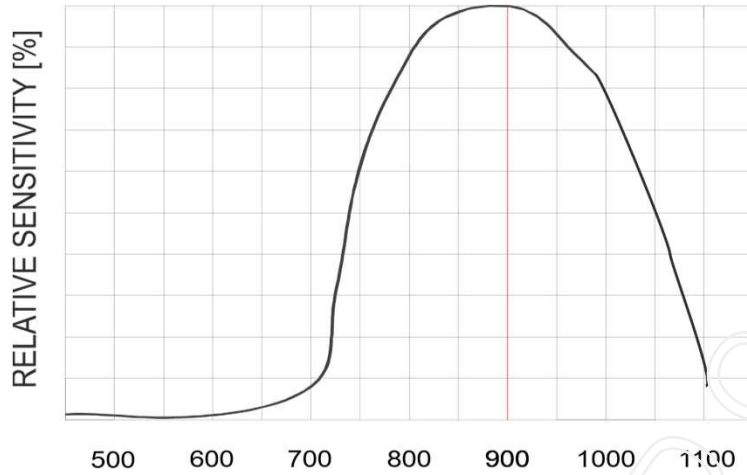
CSR3815TGG
 CSR3815TGG-TR
 CSR3815TGG-TC

Bulk
 Tape & Reel (1500pcs/reel) on request
 Bended according to customer specifications (on request)

CSR3815TGG

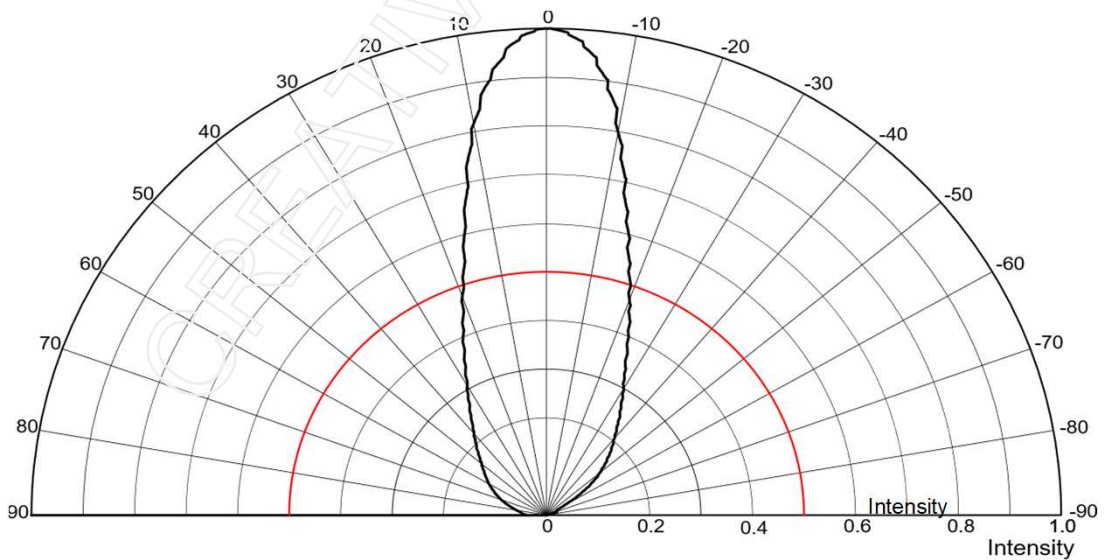
Relative Spectral Sensitivity

@ T_{ambient} = 25°C



Relative Radiation Sensitivity

@ T_{ambient} = 25°C

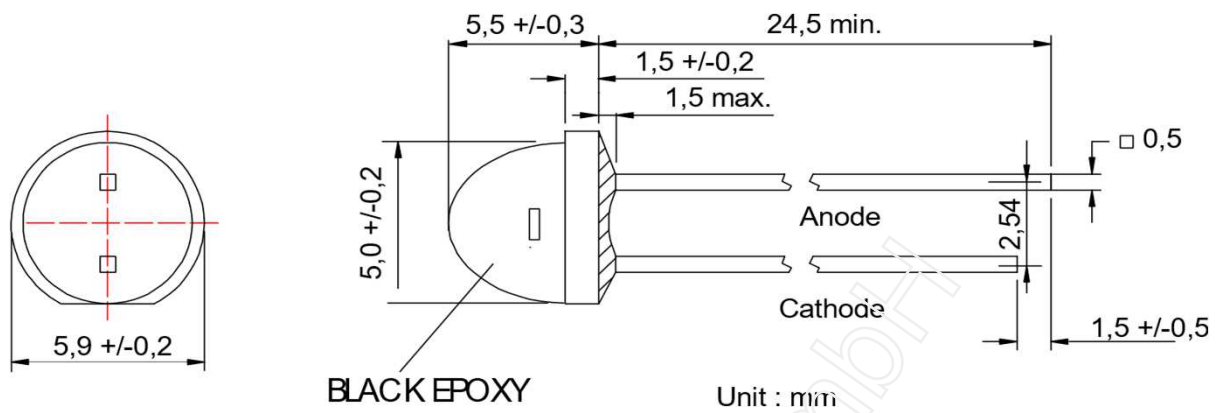


Pls. Contact us for more technical detail information !

CREATIVE LED GMBH reserves the right to make changes at any time in order to improve design and to supply the best product possible, contact us for latest device specification sheets before using.

CSR3815TGG

Mechanical Drawing



CREATIVE LED GMBH reserves the right to make changes at any time in order to improve design and to supply the best product possible, contact us for latest device specification sheets before using.