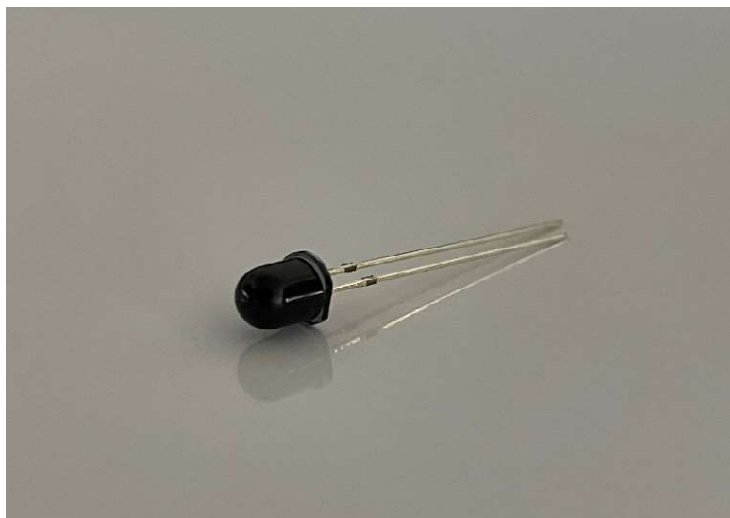


Jul 2024

Preliminary Product Specification**PIN-Photodiode THD****82°****CSR17011PQG**

- * PIN-Photodiode for general purpose
Based on Silicon- Photodiode
- * High responsivity with typ. 0,55 A/W
- * **Wide viewing angle PD with typ. 82°**
- * Daylight filtered black housing
- * Mechanical matched with CQR65 LED-serie
- * Marking on body for Cathode side

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

Symbol	Parameter	MIN	Typ	MAX	UNIT	Test conditions
I_{Light}	Reverse Light Current	8	11		μA	$E_e = 0,5\text{mW/cm}^2$ @940nm ; $V_r=10\text{V}$
I_{Dark}	Reverse Dark Current		5	10	nA	$E_e = 0 \text{ mW/cm}^2$; $V_r=10\text{V}$
I_{short}	Short Circuit Current		11		μA	$E_e = 0,5\text{mW/cm}^2$ @940nm
V_{RM}	Reverse Voltage	45			V	
V_{forward}	Reverse Breakdown Voltage	45			V	$I_R = 100 \mu\text{A}$; $E_e = 0\text{mW/cm}^2$
V_{OC}	Open Circuit Voltage		410		mV	$E_e = 0,5\text{mW/cm}^2$ @900nm
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		0,28		mm^2	
$2\Phi_{0,5}$	Full Response Angle	80	82	86	deg.	$\Phi_E = 50\%$
C_J	Junction Capacity			4	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:

CSR17011PQG

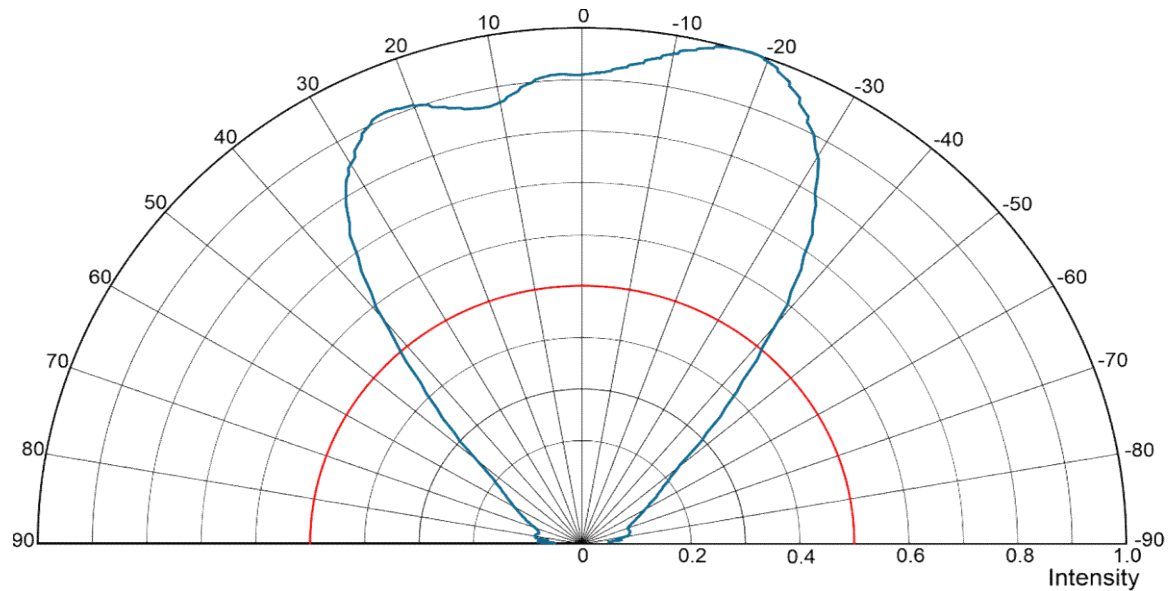
Bulk (1000pcs./bag)

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.

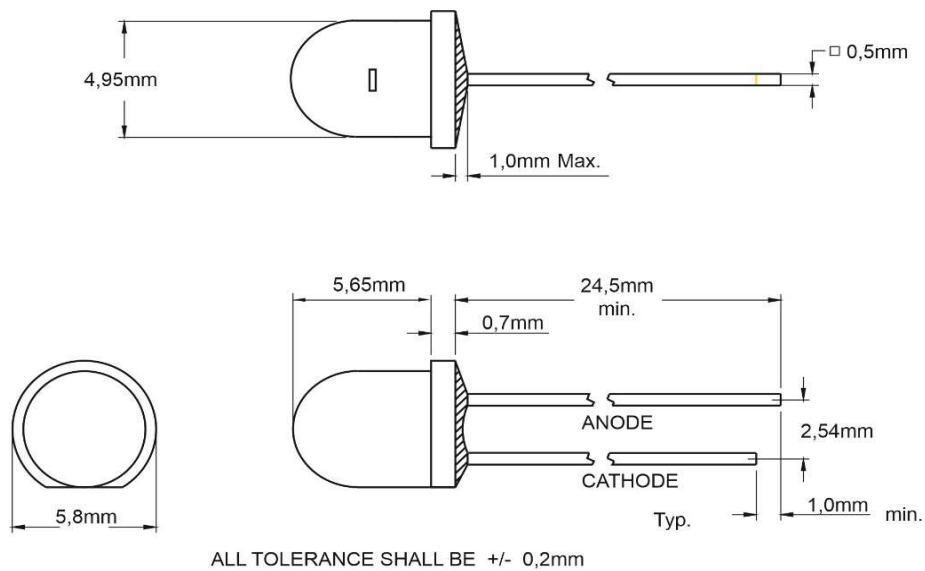
CSR17011PQG

Relative Radiation Sensitivity

@ $T_{\text{ambient}} = 25^{\circ}\text{C}$



Mechanical Drawing



Pls. Contact us for more technical detail information !

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