

**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
$I_{\text{Light}}$	Reverse Light Current	8	11		$\mu\text{A}$	$E_e = 0,5\text{mW}/\text{cm}^2$ @940nm ; $V_r = 10\text{V}$
$I_{\text{Dark}}$	Reverse Dark Current		5	10	nA	$E_e = 0 \text{ mW}/\text{cm}^2$ ; $V_r = 10\text{V}$
$I_{\text{short}}$	Short Circuit Current		11		$\mu\text{A}$	$E_e = 0,5\text{mW}/\text{cm}^2$ @940nm
$V_{\text{RM}}$	Reverse Voltage	45			V	
$V_{\text{forward}}$	Reverse Breakdown Voltage	45			V	$I_R = 100 \mu\text{A}$ ; $E_e = 0\text{mW}/\text{cm}^2$
$V_{\text{OC}}$	Open Circuit Voltage		410		mV	$E_e = 0,5\text{mW}/\text{cm}^2$ @900nm
$\lambda_{\text{peak}}$	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		$\mu\text{S}$	$V_{ce} = 5\text{V}$ ; $I_c = 1\text{mA}$ ; $R_L = 1\text{K}\Omega$
$t_r$	Rise Time		10		$\mu\text{S}$	$V_{ce} = 5\text{V}$ ; $I_c = 1\text{mA}$ ; $R_L = 1\text{K}\Omega$
A	Active Array		0,28		$\text{mm}^2$	
$2\Phi_{0,5}$	Full Response Angle	80	82	86	deg.	$\Phi_E = 50\%$
$C_J$	Junction Capacity			4	pF	$V_R = 5\text{V}$ ; $f = 1\text{Mhz}$ ; $E_e = 0\text{mW}/\text{cm}^2$
$T_{\text{Operating}}$	Operating Temperature	-40		85	°C	
$T_{\text{Storage}}$	Storage Temperature	-40		85	°C	
$T_{\text{Soldering}}$	Soldering Temperature			260	°C	Iron Soldering; 5mm from case @ max 5 sec.
$R_{\text{thJA}}$	Thermal Resistance		450		K/W	
$P_{\text{tot}}$	Total Power Dissipation			100	mW	$T_{\text{amb}} 25^\circ\text{C}$

**Order informations:**

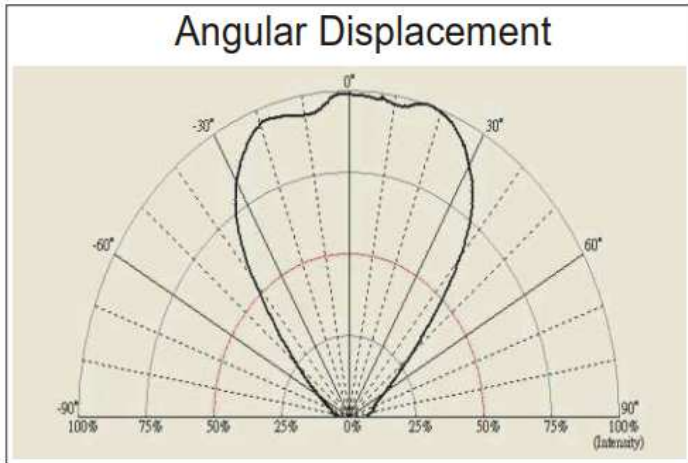
CSR17011PQG

Bulk (1000pcs./bag)

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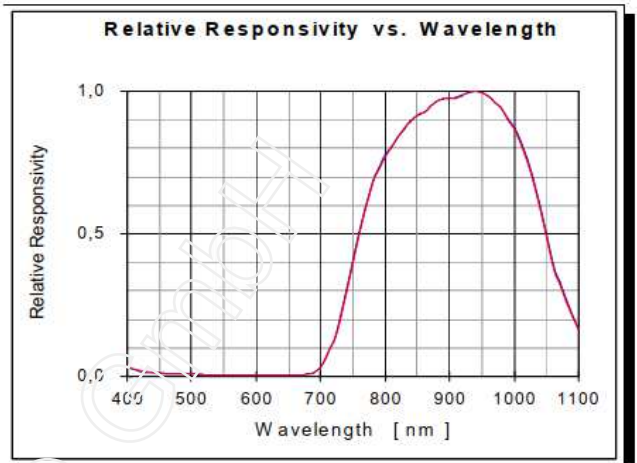
Relative Radiation Sensitivity

@ T<sub>ambient</sub> = 25°C

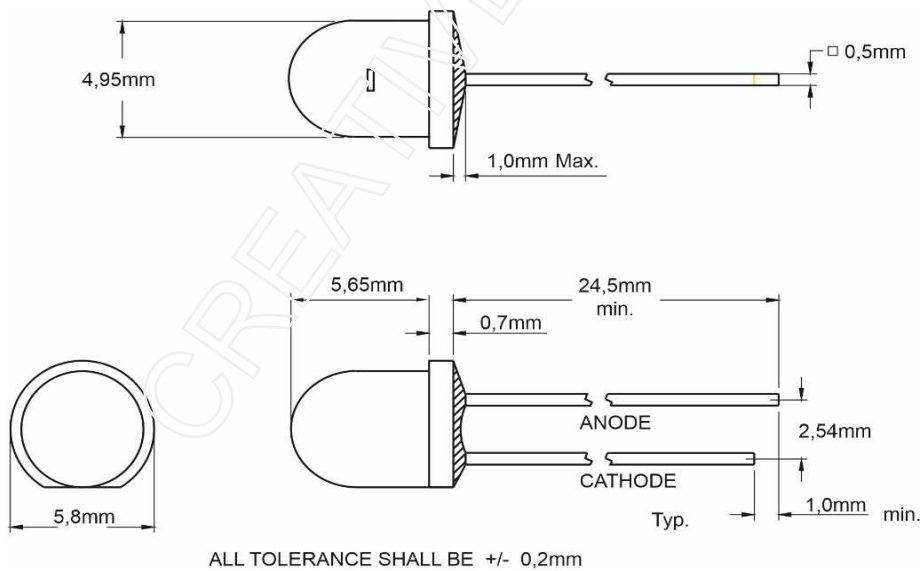


Relative Spectral Sensitivity

@ T<sub>ambient</sub> = 25°C



Mechanical Drawing



**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.