

PIN-Photodiode THD**4°****CSR67851PAN**

- * PIN-Photodiode for general purpose
Based on Silicon- Photodiode
- * Mountable in row with 5mm distance
- * **Very narrow Response Angle of typ. 4°**
- * Daylight filtered black housing
- * Mechanical matched with CQR65 LED-serie
- * SMT-Version CSS67851PAN

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

Symbol	Parameter	MIN	Typ	MAX	UNIT	Test conditions
I_{Light}	Reverse Light Current	6	10		μA	$E_e = 0,5\text{mW}/\text{cm}^2 @940\text{nm}$; $V_r=10\text{V}$
I_{Dark}	Reverse Dark Current		1	5	nA	$E_e = 0 \text{mW}/\text{cm}^2$; $V_r=10\text{V}$
I_{Short}	Short Circuit Current		11		μA	$E_e = 1\text{mW}/\text{cm}^2 @940\text{nm}$; $V_r=10\text{V}$
V_R	Reverse Voltage	40			V	
V_{forward}	Reverse Breakdown Voltage	40			V	$I_R = 100\mu\text{A}$; $E_e = 0\text{mW}/\text{cm}^2$
V_{OC}	Open Circuit Voltage		410		mV	$E_e = 5\text{mW}/\text{cm}^2 @940\text{nm}$
λ_{peak}	Wavelength of Peak Sensitivity		860		nm	max. sensitivity
$\lambda_{0,5}$	Range of Spectral Bandwidth	720		1100	nm	$I = 10\%$, typical
$2\Phi_{0,5}$	Full Response Angle	3,5	4	5	deg.	$\Phi E = 50\%$
A	Active Array		0,0314		mm^2	
t_f	Fall Time		10		μS	$V_R = 10\text{V}$; $R_L = 1\text{K}\Omega$
t_r	Rise Time		10		μS	$V_R = 10\text{V}$; $R_L = 1\text{K}\Omega$
C_J	Junction Capacity		3	6	pF	$V_R = 5\text{V}$; $f = 1\text{Mhz}$; $E_e = 0\text{mW}/\text{cm}^2$
$T_{\text{Operating}}$	Operating Temperature	-25		85	$^{\circ}\text{C}$	
T_{Storage}	Storage Temperature	-25		100	$^{\circ}\text{C}$	
$T_{\text{Soldering}}$	Soldering Temperature			260	$^{\circ}\text{C}$	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:

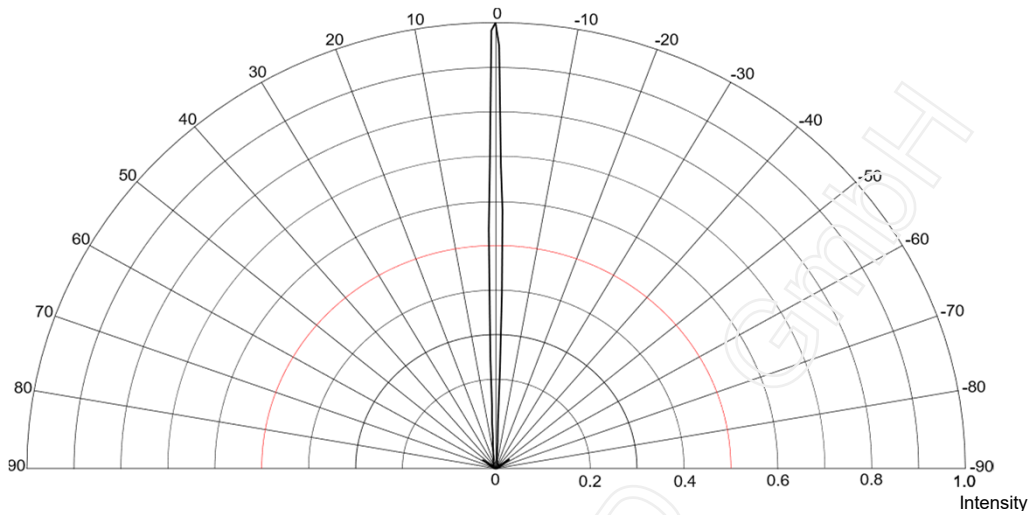
CSR67851PAN
CSR67851PAN-TR

Bulk
Tape & Reel (1500pcs/reel) on request

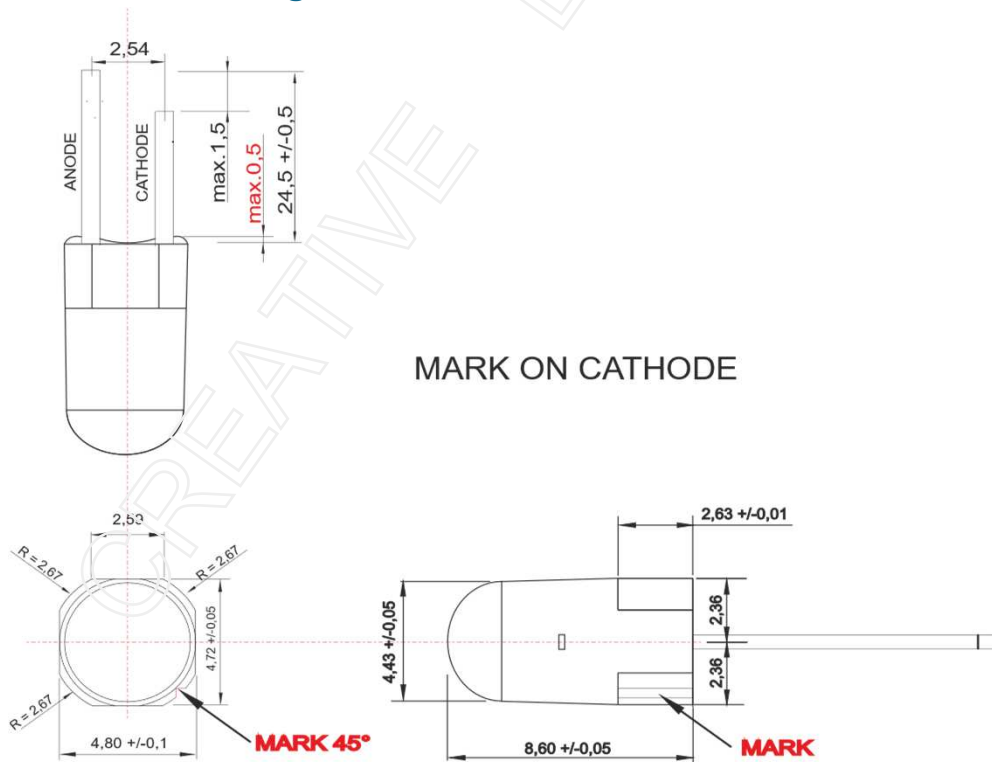
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Relative Responsivity Angle

@ T_{ambient} = 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.