

**PIN-Photodiode THD****12°****CSR67851PCN**

- \* PIN-Photodiode for general purpose  
Based on Silicon- Photodiode
- \* Mountable in row with 5mm distance
- \* **Narrow Response Angle of typ. 12**
- \* Daylight filtered black housing
- \* Mechanical matched with CQR65 LED-serie
- \* SMT-Version CSS67851PCN

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

Symbol	Parameter	MIN	Typ	MAX	UNIT	Test conditions
$I_{Light}$	Reverse Light Current	6	10		$\mu A$	$E_e = 0,5mW/cm^2 @940nm ; V_r=10V$
$I_{Dark}$	Reverse Dark Current		1	4	nA	$E_e = 0 mW/cm^2 ; V_r=10V$
$I_{Short}$	Short Circuit Current		11		$\mu A$	$E_e = 1mW/cm^2 @940nm ; V_r=10V$
$V_R$	Reverse Voltage	40			V	
$V_{forward}$	Reverse Breakdown Voltage	40			V	$I_R = 100\mu A ; E_e = 0mW/cm^2$
$V_{OC}$	Open Circuit Voltage		410		mV	$E_e = 5mW/cm^2 @940nm$
$\lambda_{peak}$	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		12		deg.	$\Phi E = 50\%$
A	Active Array		0,0314		mm <sup>2</sup>	
$t_f$	Fall Time		10		$\mu S$	$V_R = 10V ; R_L = 1K\Omega$
$t_r$	Rise Time		10		$\mu S$	$V_R = 10V ; R_L = 1K\Omega$
$C_J$	Junction Capacity		3	6	pF	$V_R = 5V ; f = 1Mhz ; E_e = 0mW/cm^2$
$T_{Operating}$	Operating Temperature	-25		85	°C	
$T_{Storage}$	Storage Temperature	-25		100	°C	
$T_{Soldering}$	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	$T_{amb} 25^\circ C$

**Order informations:**

CSR67851PCN  
CSR67851PCN-TR

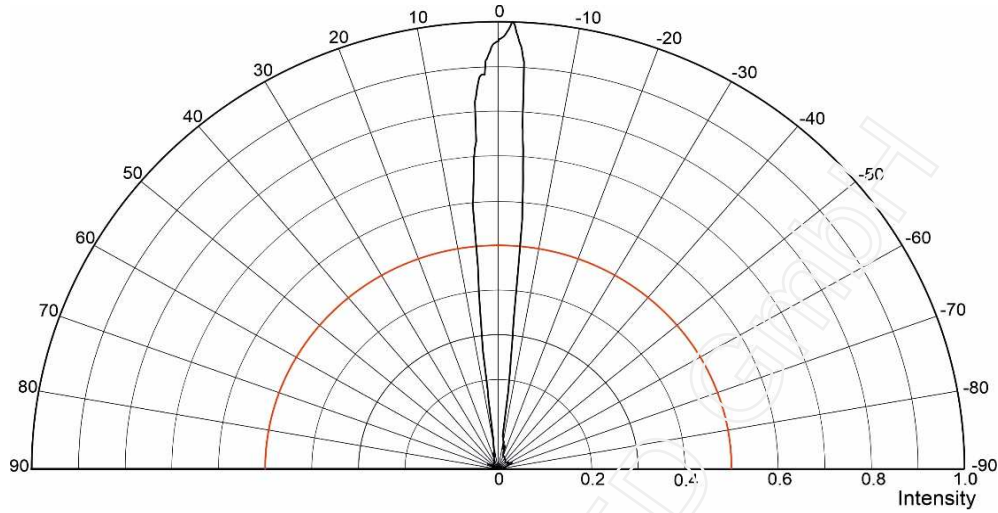
Bulk  
Tape & Reel ( 1000pcs/reel) on request

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.

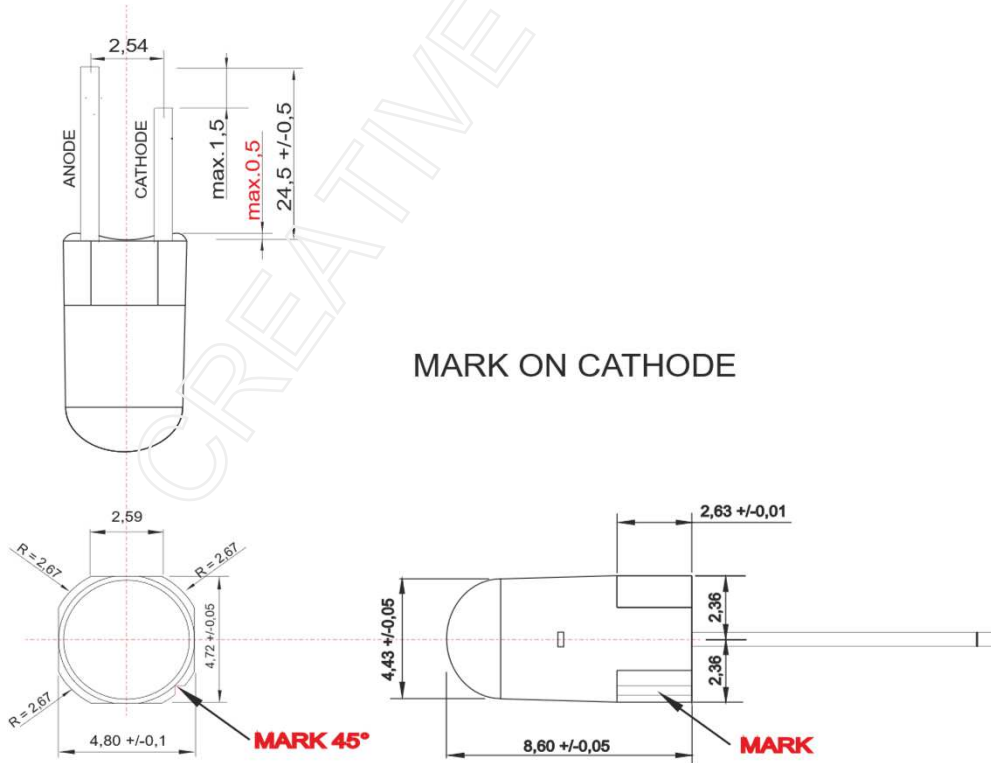
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Relative Responsivity Angle

@ T<sub>ambient</sub> = 25°C



Mechanical Drawing



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