#### Aug 2022

### Preliminary Product Specification

**PIN-Photodiode THD** 

# CSR67821TBK

GREATIVE GMBH LED

- \* PIN-Photodiode for general purpose Based on Silicon- Photodiode
- \* Mountable in row with 5mm distance
- \* Verry narrow Response Angle of typ. 10 degree with a pointed tip
- \* Daylight filtered black housing
- \* Mechanical matched with CQR65 LED-serie
- \* SMT-Version CSS67871TBR



Symbol	Parameter	MIN	Тур	MAX	UNIT	Test conditions
l <sub>Light</sub>	Reverse Light Current	35	50	$\sim$	μA	Ee = 1mW/cm² @940nm ; Vr=10V
l <sub>Dark</sub>	Reverse Dark Current		1	6	nA	Ee = 0 mW/cm² ; Vr=10V
I <sub>Short</sub>	Short Circut Current	$\square$	11		μA	Ee = 1mW/cm² @940nm ; Vr=10V
V <sub>R</sub>	Reverse Voltage	35	7		V	
V forward	Reverse Breakdown Voltage	35			V	IR = 100µA ; Ee = 0mW/cm²
V <sub>oc</sub>	Open Circut Voltage		410		mV	Ee = 5mW/cm² @940nm
$\lambda_{\text{peak}}$	Wavelength of Peak Sensitivity		860		nm	max. sensitivity
λ <sub>0,5</sub>	Range of Spectral Bandwidth	720		1100	nm	I = 10%, typical
Φ <sub>0,5</sub>	Full Response Angle		10		deg.	ΦE = 50%
А	Active Array		0,14		mm²	
t <sub>f</sub>	Fall Time		10		μS	VR = 10V ; RL = 1KΩ
t <sub>r</sub>	Rise Time		10		μS	VR = 10V ; RL = 1KΩ
Сı	Junction Capacity		2	4	pF	VR = 5V ; f = 1Mhz; Ee = 0mW/cm <sup>2</sup>
T <sub>Operating</sub>	Operating Temperature	-30		85	°C	
T <sub>Storage</sub>	Storage Temperature	-30		85	°C	
T Soldering	Soldering Temperature			260	°C	Iron Soldering; 5mm from case @ max 5 sec
R <sub>thJA</sub>	Thermal Resistance		450		K/W	
P <sub>tot</sub>	Total Power Dissipation			100	mW	Tamb 25°C

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

### **Order informations:**

CSR67821TBK
CSR67821TBK-TR
CSR67821TBK-TC

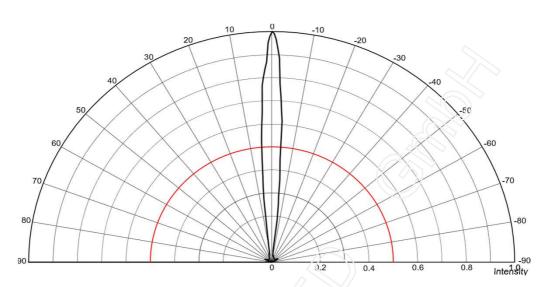
Bulk Tape & Reel (1500pcs/reel ) on request Bended according to customer specifications ( on request )

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.

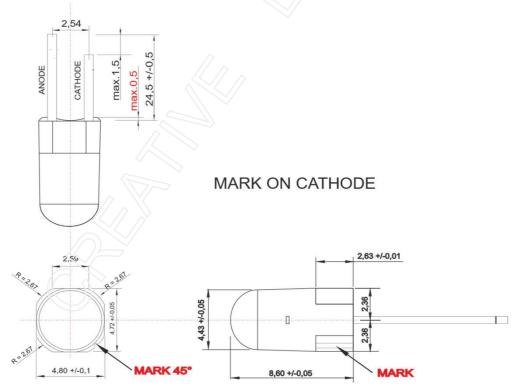
CREATIVE LED GMBH CSR67821TBK TDS 1.00 1 - 2 DESIGNED BY LEDESIGN ENGINEERING EMAIL: SALES(@)CREATVELED.COM 01.08.2022

# **Relative Responsitivity Angle**

@ 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.