

**Product Specification****PIN-Photodiode THD****125°****CST38211TVG**

- \* PIN-Photodiode for general purpose  
Based on Silicon- Photodiode
- \* T1 (3mm) package
- \* **Response Angle of typ. 125°**
- \* High responsivity with typ. 0,55 A/W
- \* Daylight filtered black housing
- \* Mechanical matched with CQT- LED-serie

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

Symbol	Parameter	MIN	Typ	MAX	UNIT	Test conditions
$I_{Light}$	Reverse Light Current	6	8		$\mu A$	$E_e = 1mW/cm^2 @850nm ; V_r=10V$
$I_{Dark}$	Reverse Dark Current		2		nA	$E_e = 0 mW/cm^2 ; V_r=10V$
$I_{Short}$	Short Circuit Current		15		$\mu A$	$E_e = 1mW/cm^2 @940nm ; V_r=10V$
$V_R$	Reverse Voltage			50	V	
$V_{forward}$	Reverse Breakdown Voltage	30			V	$I_R = 100\mu A ; E_e = 0mW/cm^2$
$V_{OC}$	Open Circuit Voltage		440		mV	
$\lambda_{peak}$	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		125		deg.	$\Phi E = 50\%$
A	Active Array		0,74		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	8	pF	$V_R = 5V ; f = 1Mhz ; E_e = 0mW/cm^2$
$T_{Operating}$	Operating Temperature	-40		85	°C	
$T_{Storage}$	Storage Temperature	-40		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:**

CST38211TVG

CST38211TVG-TR

CST38211TVG-TC

Bulk

Tape &amp; Reel (1500pcs/reel ) on request

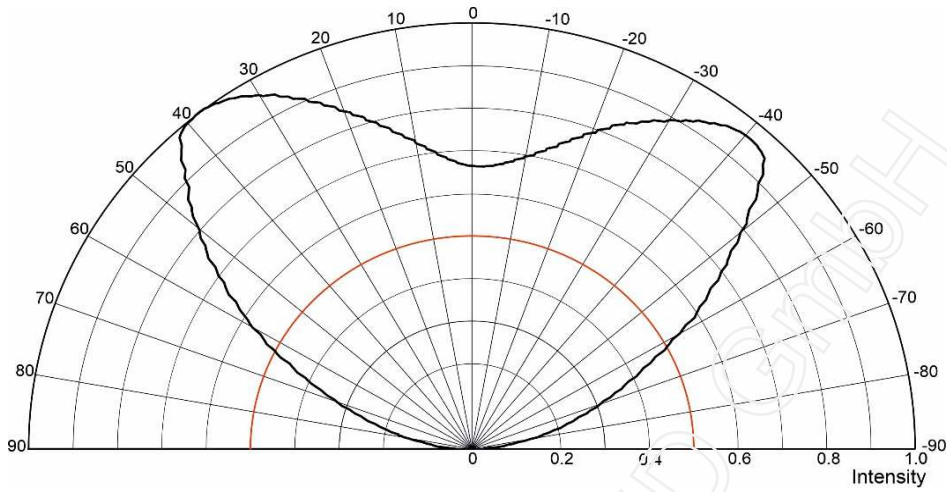
Bended according to customer specifications ( on request )

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.

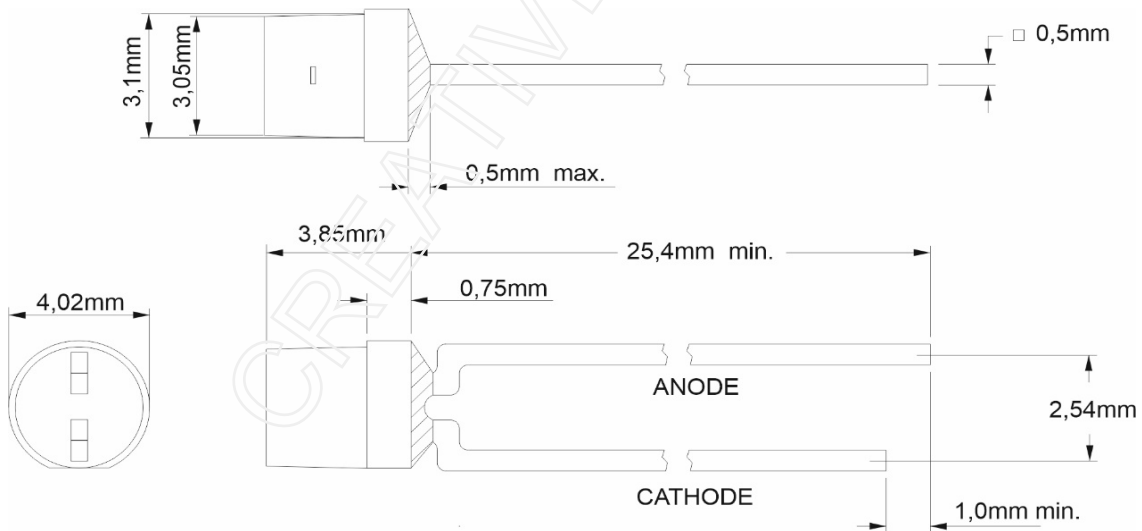
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## Relative Responsivity Angle

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



## Mechanical Drawing



ALL TOLERANCE SHALL BE +/- 8mil / 0,2mm

**Pls. Contact us for more technical detail information !**

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