CREATIVE GMBH LED

Preliminary Product Specification

PIN-Photodiode THD 20,5° CSR67861TDG

* PIN-Photodiode for general purpose
  Based on Silicon- Photodiode
* Mountable in row with 5mm distance
* **Response Angle of typ. 20,5°**
* High responsitivity with typ. 0,55 A/W
* Daylight filtered black housing
* Mechanical matched with CQR65 LED-serie
* Bended version on request
  SMT-Version CSS67861TDG

Optical and Electrical Characteristics @Tambient =25°C

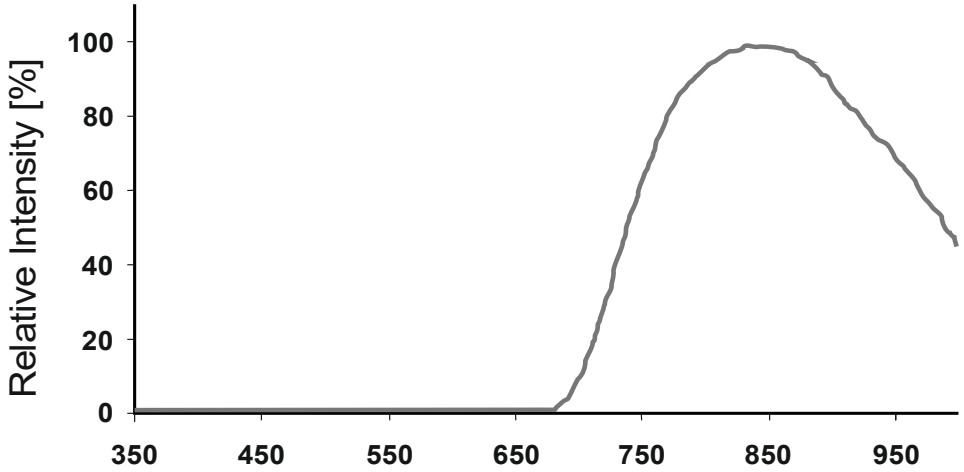
Symbol	Parameter	MIN	Typ	MAX	UNIT	Test conditions
I_{Light}	Reverse Light Current	35	50		µA	Ee = 1mW/cm² @940nm ; Vr=10V
I_{Dark}	Reverse Dark Current		2	10	nA	Ee = 0 mW/cm² ; Vr=10V
I_{short}	Short Circuit Current		11		µA	Ee = 1mW/cm² @940nm
V_{RM}	Reverse Voltage	45			V	
$V_{forward}$	Reverse Breakdown Voltage	45			V	IR = 100 µA ; Ee = 0mW/cm²
V_{OC}	Open Circut Voltage		410		mV	Ee = 5mW/cm² @900nm
λ_{peak}	Wavelength of Peak Sensitivity		860		nm	max. sensitivity
$\lambda_{0,5}$	Range of Spectral Bandwidth	720		1100	nm	I = 10%, typical
t_f	Fall Time		10		µS	Vce = 5V ; Ic = 1mA ; RL = 1KΩ
t_r	Rise Time		10		µS	Vce = 5V ; Ic = 1mA ; RL = 1KΩ
A	Active Array		0,75		mm²	
$2\Phi_{0,5}$	Full Response Angle	19,5	20,5	21,5	deg.	ΦE = 50%
C_J	Junction Capacity		4	6	pF	VR = 5V ; f = 1Mhz; Ee = 0mW/cm²
$T_{Operating}$	Operating Temperature	-40		85	°C	
$T_{Storage}$	Storage Temperature	-40		85	°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	Tamb 25°C

Order informations:

CSR67861TDG	Bulk
CSR67861TDG-TAXX	Taped in Ammopack (1000pcs/pack)
CSR67861TDG-TR	Tape & Reel (1500pcs/reel) on request
CSR67861TDG-TC	Bended according to customer specifications (on request)

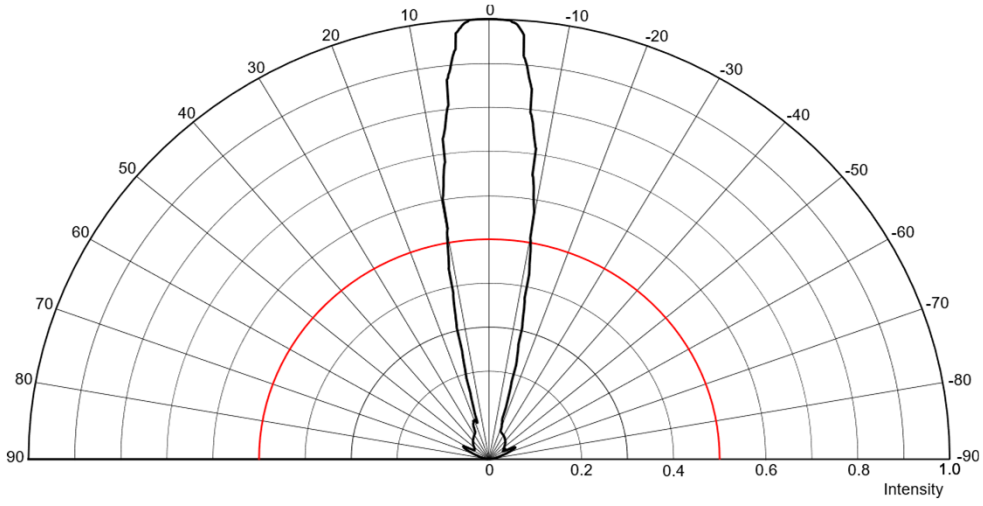
Relative Spectral Sensitivity

@ $T_{ambient}$ = 25°C



Relative Radiation Sensitivity

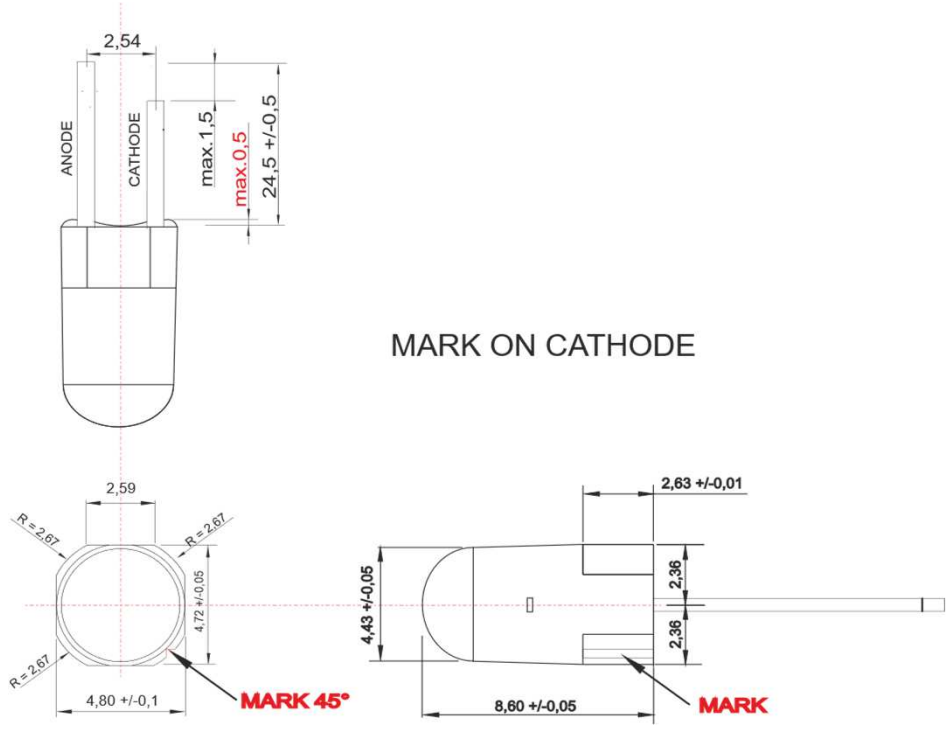
@ $T_{ambient}$ = 25°C



Pls. Contact us for more technical detail information !

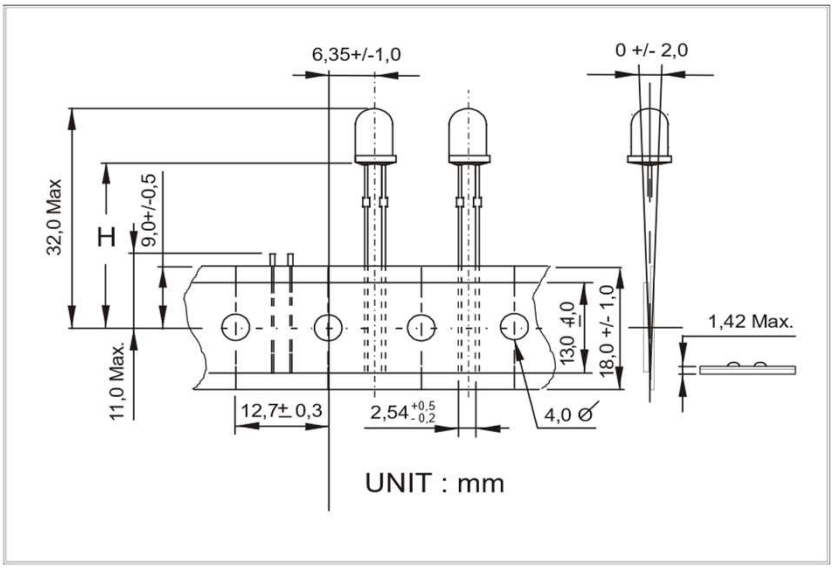
CSR67861TDG

Mechanical Drawing



Taping Specification

Option Code	H [mm] +/- 0,5mm
TA01	18,0
TA11	19,0
TA21	20,0
TA31	21,0
TA41	22,0
TA51	23,0
TA61	24,0
TA71	25,0
TA81	26,0



Unless specially requested, outgoing first lead is ANODE