

Preliminary Product Specification**CSR65012TES****22°****InGaAs Photodiode**

- * InGaAs PIN Photodiode for general purpose
- * Mountable in row with 5mm distance
- * 500µm round active area, perfect suitable for optical fiber
- * Mechanically and technically matched to the CQR66 LED series



R	Responsivity	0.9	0.95		A/W	@1310nm ; Vr=5V
R	Responsivity	0.95	1		A/W	@1550nm ; Vr=5V
I _{CEO}	Collector Dark Current			1	nA	Ee = 0 mW/cm ² ; Vr=5V
V _{(BR)ECO}	Emitter Collector Breakdown Voltage	5			V	Ic = 100µA ; H = 0mW/cm ²
V _{CEsat}	Collector-Emitter Saturation Voltage			0.3	V	Ib = 100µA Ic = 2mA
λ _{peak}	Wavelength of Peak Sensitivity		1550		nm	max. sensitivity
λ _{0.5}	Range of Spectral Bandwidth	850		1700	nm	I = 10%, typical
2Φ _{0.5}	Full Response Angle		22	25	deg.	ΦE = 50%
A	Active Area		0.196		mm ²	
C	Capacity			40	pF	VR = 5V ; f = 1Mhz; Ee = 0mW/cm ²
T _{Operating}	Operating Temperature	-40		85	°C	
T _{Storage}	Storage Temperature	-40		100	°C	
T _{Soldering}	Soldering Temperature			240	°C	Iron Soldering; 5mm from case @ max 5 sec.
R _{thJA}	Thermal Resistance		450		K/W	
P _{tot}	Total Power Dissipation				mW	Tamb 25°C

Order informations:

InGaAs Photodiode

CSR65012TES

Bulk (1000pcs./bag)

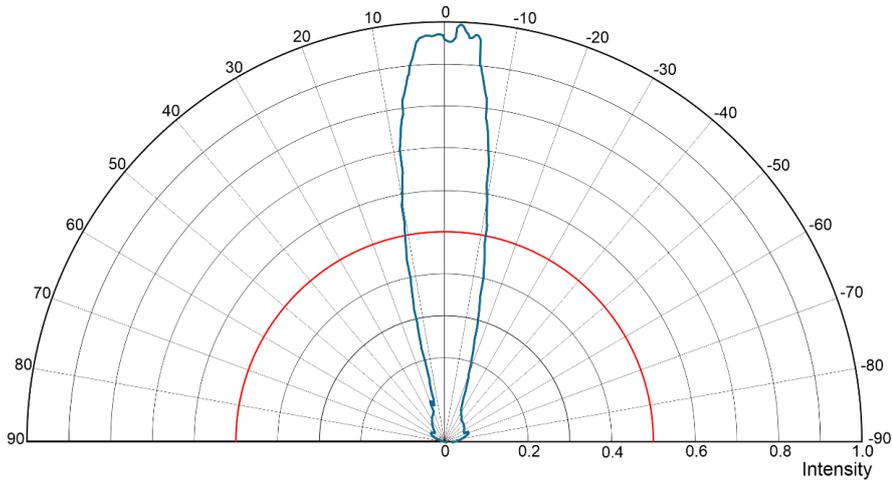
Pls. Contact us for more technical detail information !

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.

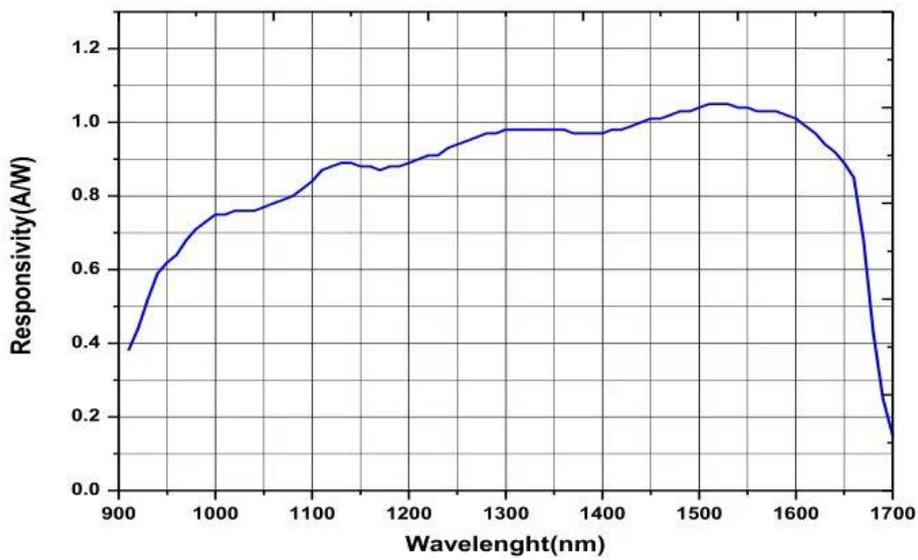
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Relative Responsivity Angle:

@ T_{ambient} = 25°C



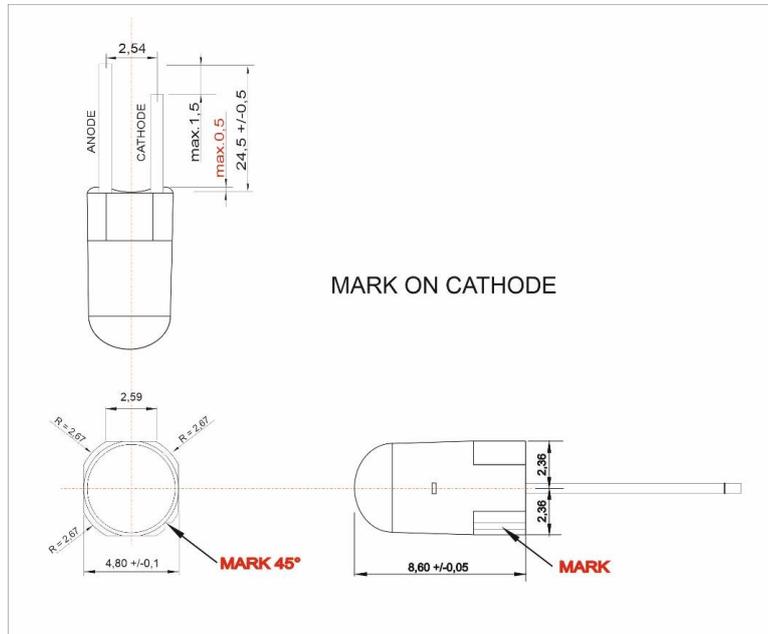
Relative Sensitivity vs. Wavelength:



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Mechanical Drawing:

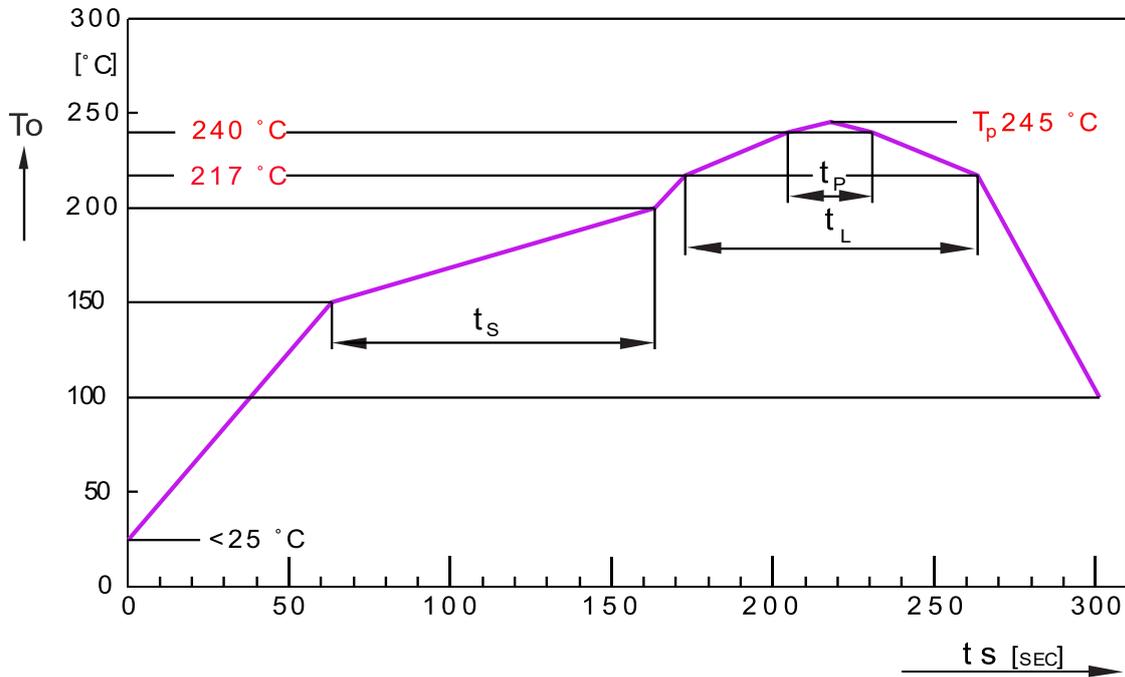


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Reflow Soldering Profile:

Prec onditioning: JEDEC Level 3 acc. to JEDEC J-STD-020D.01



PROFIL FEATURES	SYMBOL	PB-FREE (SNAGCU) ASSEMBLY			UNIT
		MINIMUM	RECOMMENDATION	MAXIMUM	
RAMP-UP RATE TO PREHEAT ⁽¹⁾ 25 °C TO 150 °C			2	3	K/SEC
TIME T_B T_{BMIN} TO T_{BMAX}	T_B	60	100	120	SEC
RAMP-UP RATE TO PEAK ⁽¹⁾ T_{BMAX} TO T_P			2	3	K/SEC
LIQUIDUS TEMPERATURE	T_L	217			°C
TIME ABOVE LIQUIDUS TEMPERATURE	T_L		80	100	SEC
PEAK TEMPERATURE	T_P		240	245/260 ⁽²⁾	°C
TIME WITHIN 5 °C OF THE SPECIFIED PEAKTEMPERATURE	T_{P-SK}	10	20	30	SEC
RAMP DOWN RATE T_P TO 100 °C			3	6	K/SEC
TIME 25 °C TO T_P			300	480 ⁽²⁾	SEC

ALL TEMPERATURES REFERS TO THE CENTER OF THE PACKAGES, MEASURED ON THE TOP OF COMPONENT

(1) SLOPE CALCULATION DT/DT: DT MAX.5 SEC. ; FULFILLMENT FOR THE WHOLE T-RANGE

(2) THESE MAXIMUM VALUES ARE STRONG DEPEND ON THE REFLOW-SOLDERING EQUIPMENT AND APPLICATION