Mrz 2022

Product Specification

Phototransistor

40°

CSR68491PHK

- * Phototransistor with separate Base for general purpose
- * Mountable in row with 5mm distance
- * Response Angle of typ. 40°
- * Daylight filtered black housing
- * Mechanical matched with CQR6x LED-serie
- * SMT-Version CSS68491PHK
- * Current Gain selected

Optical and Electrical Characteristics @Tambient =25°C



Symbol	Parameter	MIN	Тур	MAX	UNIT	Test conditions
I _{Light}	Collector Light Current	1,7	2,9	(Δ)	mA	Ee = 0,5mW/cm² @940nm ; Vr=10V
I _{CEO}	Collector Dark Current			100	nA	Ee = 0 mW/cm² ; Vr=10V
V (BR)CEO	Collector Emitter Breakdown Voltage	30		1	V	Ic = 100 μA ; Ib = 0
V (BR)ECO	Emitter Collector Breakdown Voltage	5	2.	\geq	V	le = 100 μA ; lb = 0
V _{CEsat}	Collector-Emitter Saturation Voltage		0,3		V	lb = 100µA lc = 2mA
λ_{peak}	Wavelength of Peak Sensitivity		860		nm	max. sensitivity
λ _{0,5}	Range of Spectral Bandwidth	700	5	1150	nm	I = 10%, typical
t _f	Fall Time		15		μS	Vce = 5V ; Ic = 1mA ; RL = 1KΩ
t _r	Rise Time		15		μS	Vce = 5V ; lc = 1mA ; RL = 1KΩ
А	Active Array		0,145		mm²	
ß	Current Gain	500		1000		Vce = 5 V ; Ic = 2mA
2Φ _{0,5}	Full Response Angle		40		deg.	ΦE = 50%
C _{CEO}	Collector Emitter Capacitance		6		pF	VR = 5V ; f = 1Mhz; Ee = 0mW/cm ²
T Operating	Operating Temperature	-30		85	°C	
T _{Storage}	Storage Temperature	-30		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			50	mW	Tamb 25°C

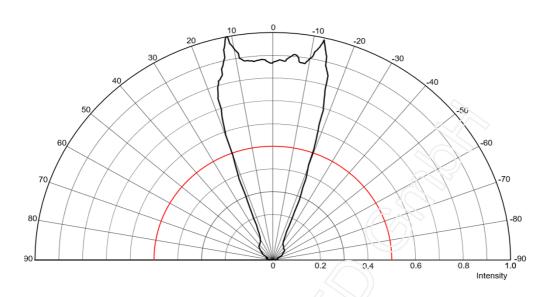
Order informations:

CSR68491PHK	Bulk (1000 pcs./Bag - standard)
CSR68491PHK-TC	Bended according to customer specification (on request)
CSR68491PHK-TR	Reel taped (1000 pcs./reel)
CSR68491PHK-CT1.6	Lead length 1.6mm cutted (standard)

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.

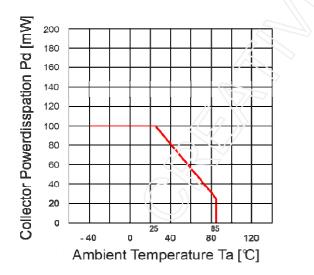
Relative Radiation Sensitivity

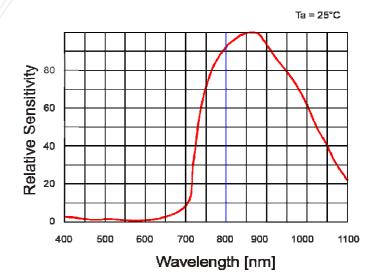
@ T_{ambient} = 25°C



Collector Powerdisspation vs. Ambient Temperature

Relative Sensitivity vs. Wavelength

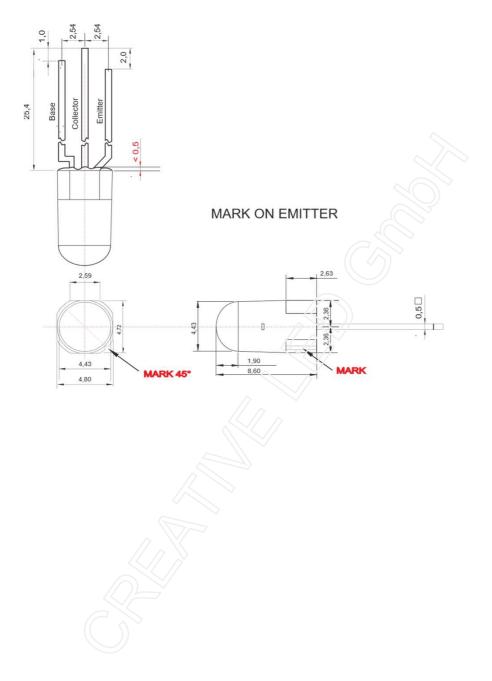




Pls. Contact us for more technical detail information !

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Mechanical Drawing



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Taping Dimensions :

Pitch : 2,54mm STRAINGHT LEAD

REMARK :1. The dimensions of H may be different among various models2. Quantity per reel for 3mm: 2000pcs.; 5mm : 1000 pcs.

3. Unless specially requested, outgoing first lead is ANODE

