

Phototransistor**15°****CSR38531PCK**

- * 4,8mm Phototransistor with separate Base for general purpose
- * Mountable in row with 5mm distance
- * **Response Angle of typ. 15 degree with narrow tip**
- * Daylight filtered black housing
- * Mechanical matched with CQR- LED Serie
- * SMT-Version CSS38531PCK

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

Symbol	Parameter	MIN	Typ	MAX	UNIT	Test conditions
I_{Light}	Reverse Light Current	5	8		mA	$E_e = 0,5mW/cm^2 @940nm ; V_r=10V$
I_{Dark}	Reverse Dark Current		1		nA	$E_e = 0 mW/cm^2 ; V_r=10V$
V_{ceo}	Collector-Emitter Breakdown Voltage	30			V	$I_c = 100\mu A ; H = 0mW/cm^2$
V_{eco}	Emitter-Collector Breakdown Voltage	5			V	$I_c = 100\mu A ; H = 0mW/cm^2$
V_{CEsat}	Collector-Emitter Saturation Voltage			0,3	V	$I_b = 100\mu A ; H = 0mW/cm^2$
λ_{peak}	Wavelength of Peak Sensitivity	850	860		nm	max. sensitivity
$\lambda_{0,5}$	Range of Spectral Bandwidth	700		1150	nm	$I = 10\%$, typical
$2\Phi_{0,5}$	Full Response Angle		15		deg.	$\Phi E = 50\%$
β	Current Gain	800		1300		$E_e = 0,5mW/cm^2 @940nm ; V_r=10V$
A	Active Array		0,146		mm ²	
t_f	Fall Time		15		μS	$V_{cc} = 5V ; I_c = 1mA ; R_L = 1K\Omega$
t_r	Rise Time		15		μS	$V_{cc} = 5V ; I_c = 1mA ; R_L = 1K\Omega$
$T_{Operating}$	Operating Temperature	-25		85	°C	
$T_{Storage}$	Storage Temperature	-25		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:

CSR38531PCK-XX

Bulk

CSR38531PCK-TC

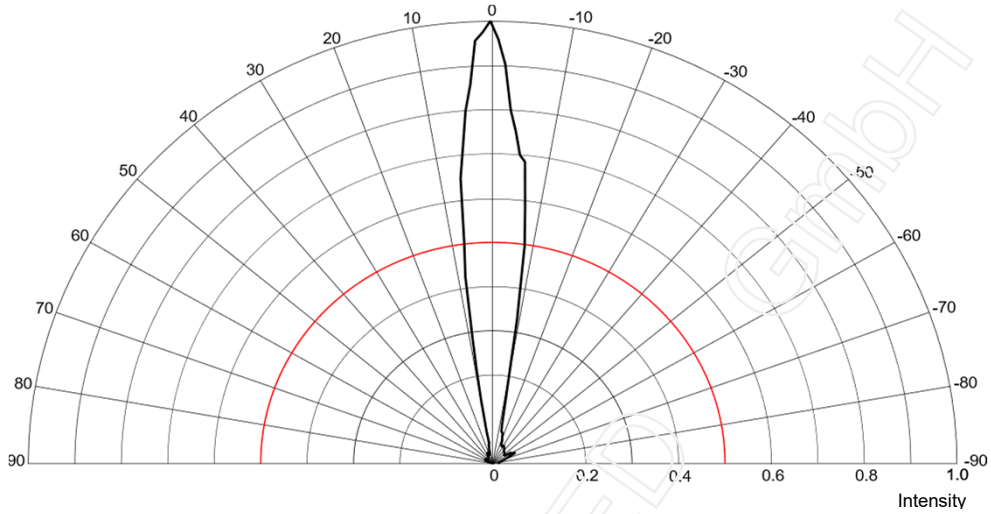
Bended according to customer specifications (on request)

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.

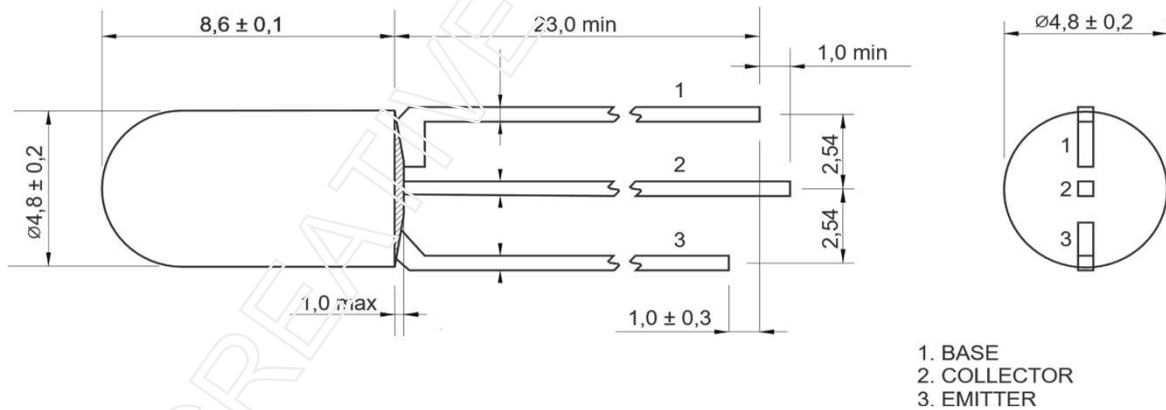
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Relative Responsivity Angle

@ T_{ambient} = 25°C



Mechanical Drawing



Pls. Contact us for more technical detail information !

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