

Phototransistor

35°

CSR38501PGK

- * 4,8mm Phototransistor with separate Base for general purpose
- * Mountable in row with 5mm distance
- * Response Angle of typ. 35 degree with wide tip, $2\Phi_{0,9} \approx 20$ degree typ.
- * Daylight filtered black housing
- * Mechanical matched with CQR- LED-Serie
- * SMT-Version CSS38501PGK
- * Current Gain selected



Optical and Electrical Characteristics @Tambient =25°C

Symbol	Parameter	MIN	Typ	MAX	UNIT	Test conditions
I_{Light}	Collector Light Current	2,1			mA	$E_e = 0,5mW/cm^2 @940nm$; $V_r=10V$
I_{CEO}	Collector Dark Current		2		nA	$E_e = 0 mW/cm^2$; $V_r=10V$
$V_{(BR)CEO}$	Collector Emitter Breakdown Voltage	30			V	$I_c = 100\mu A$; $H = 0mW/cm^2$
$V_{(BR)ECO}$	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		860		nm	max. sensitivity
$\lambda_{0,5}$	Range of Spectral Bandwidth	700		1150	nm	$I = 10\%$, typical
$2\Phi_{0,5}$	Full Response Angle		35		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		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	$T_{amb} 25^\circ C$

Order informations:

CSR38501PGK

CSR38501PGK-TC

CSR38501PGK-TR

Bulk

Bended according to customer specifications (on request)

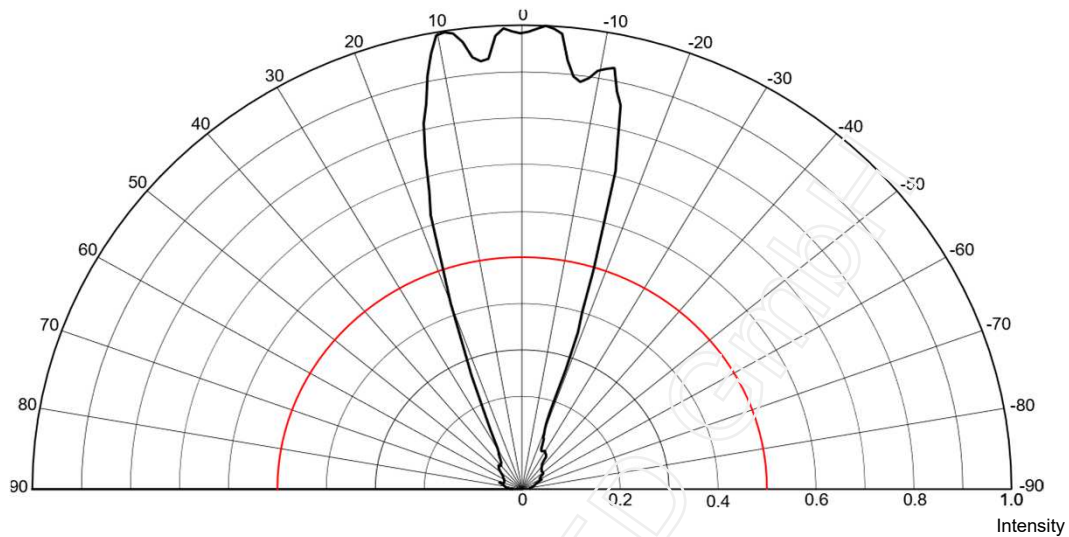
Tape & Reel (1000pcs/reel) on request

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.

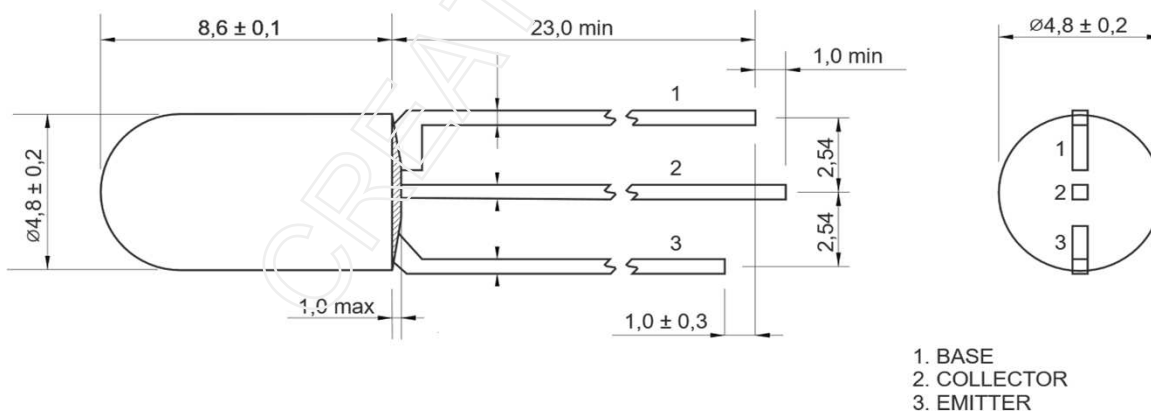
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Relative Responsivity Angle

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



Mechanical Drawing



Pls. Contact us for more technical detail information !

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