

**Phototransistor****35°****CSR38491PGK**

- \* 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 CSS38491PGK
- \* Current Gain selected

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

Symbol	Parameter	MIN	Typ	MAX	UNIT	Test conditions
$I_{Light}$	Collector Light Current	1,7			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	$I_b = 100\mu A$ ; $H = 0mW/cm^2$
$\lambda_{peak}$	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.	$\Phi E = 50\%$
$\beta$	Current Gain	500		1000		$E_e = 0,5mW/cm^2 @940nm$ ; $V_r=10V$
A	Active Array		0,146		mm <sup>2</sup>	
$t_f$	Fall Time		15		$\mu S$	$V_{cc} = 5V$ ; $I_c = 1mA$ ; $R_L = 1K\Omega$
$t_r$	Rise Time		15		$\mu S$	$V_{cc} = 5V$ ; $I_c = 1mA$ ; $R_L = 1K\Omega$
$T_{Operating}$	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:**

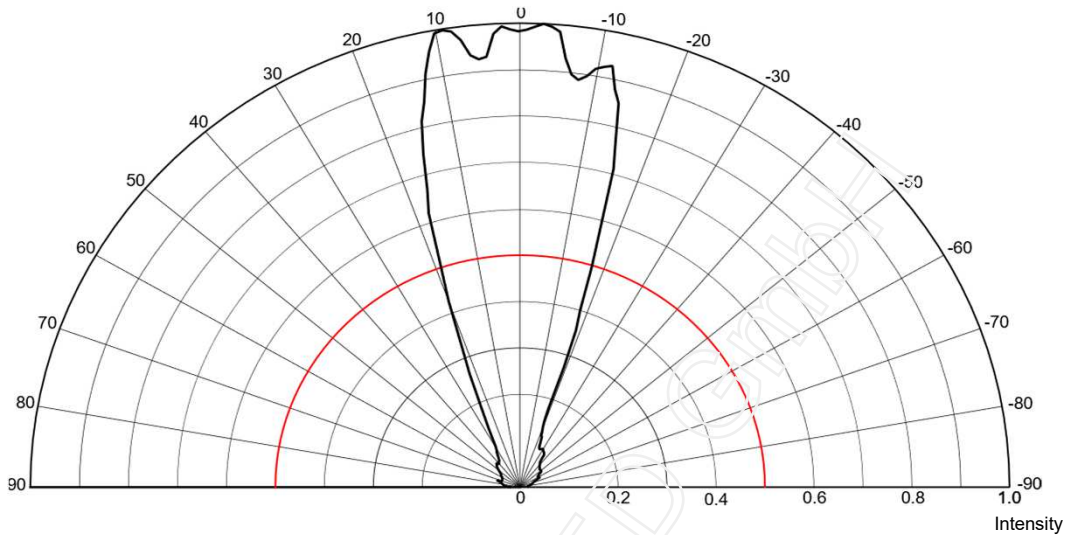
CSR38491PGK                      Bulk  
 CSR38491PGK-TC                Bended according to customer specifications ( on request )  
 CSR38491PGK-TR                Tape & Reel ( 1000pcs/reel) on request

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.

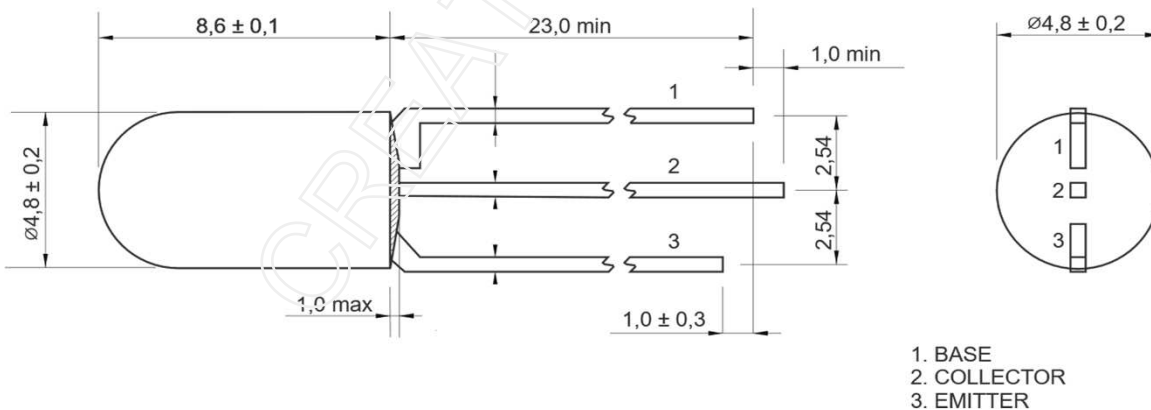
CSR38491PGK

Relative Responsivity Angle

@ T<sub>ambient</sub> = 25°C



Mechanical Drawing



Pls. Contact us for more technical detail information !

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