

Phototransistor**18°****CSR68521PDK**

- * 4.8mm Phototransistor with separate Base for general purpose
- * Mountable in row with 5mm distance
- * **Small Response Angle of typ. 18 degree**
- * Daylight filtered black housing optimized for LED with 855nm - 870nm
- * Mechanical matched with CQR65 LED-serie
- * SMT-Version CSS68521PDK mountable in row with 5mm distance
- * Current Gain selected

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

Symbol	Parameter	MIN	Typ	MAX	UNIT	Test conditions
I_{Light}	Collector Light Current	5	6,5		μA	$E_e = 0,5mW/cm^2 @940nm ; V_r=10V$
I_{CEO}	Collector Dark Current			70	nA	$E_e = 0 mW/cm^2 ; V_r=10V$
$V_{(BR)CEO}$	Collector Emitter Breakdown Voltage	30			V	$I_c = 100 \mu A ; I_b = 0$
$V_{(BR)ECO}$	Emitter Collector Breakdown Voltage	5			V	$I_e = 100 \mu A ; I_b = 0$
V_{CEsat}	Collector-Emitter Saturation Voltage		0,3		V	$I_b = 100\mu A ; I_c = 2mA$
λ_{peak}	Wavelength of Peak Sensitivity	855	860	880	nm	max. sensitivity
$\lambda_{0,5}$	Range of Spectral Bandwidth	700		1100	nm	$I = 10\%$, typical
t_f	Fall Time		15		μS	$V_{ce} = 5V ; I_c = 1mA ; R_L = 1K\Omega$
t_r	Rise Time		15		μS	$V_{ce} = 5V ; I_c = 1mA ; R_L = 1K\Omega$
A	Active Array		0,145		mm ²	
β	Current Gain	500		1000		$V_{ce} = 5 V ; I_c = 2mA$
$2\Phi_{0,5}$	Full Response Angle		18		deg.	$\Phi E = 50\%$
$T_{Operating}$	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	$T_{amb} 25^\circ C$

Order informations:

CSR68521PDK

Bulk (1000 pcs/Bag)

CSR68521PDK-TC

Bended according to customer specifications (on request)

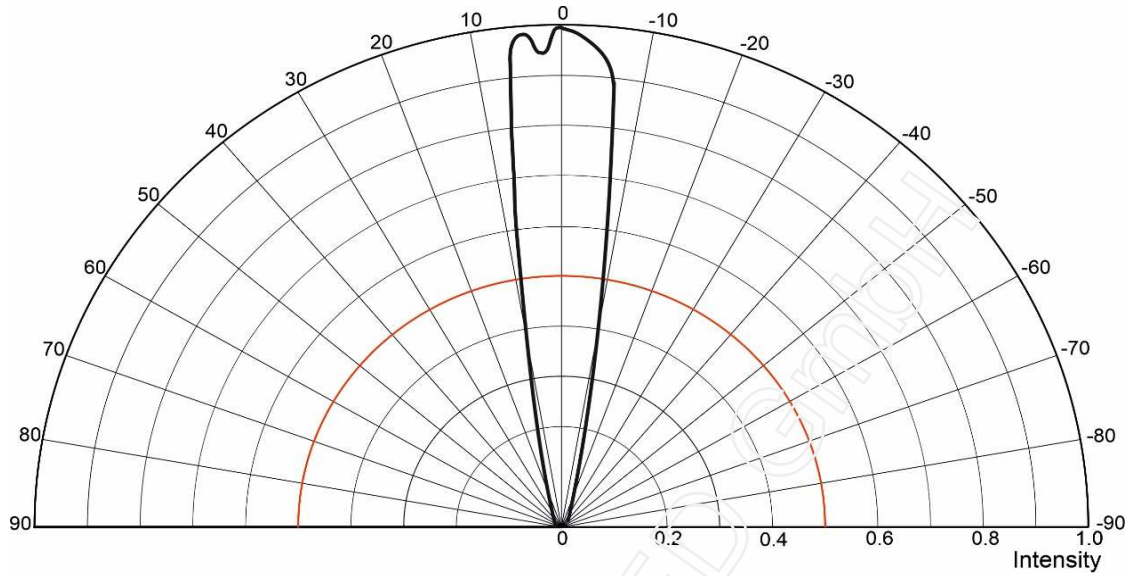
CSR68521PDK-TR

Tape & Reel (1000 pcs./Reel) on request

CSR68521PDK

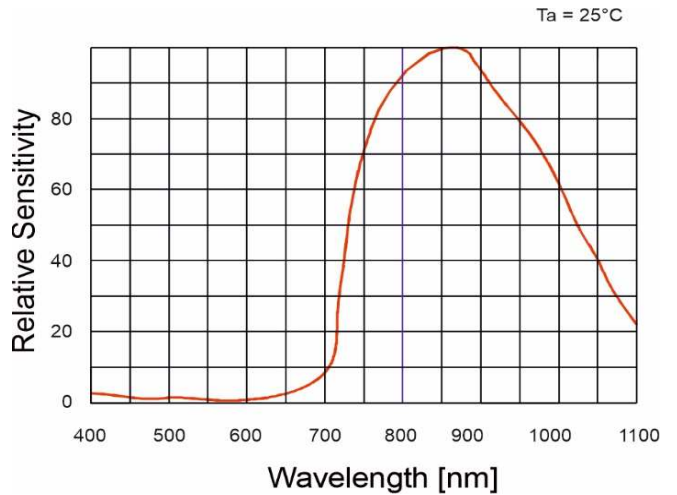
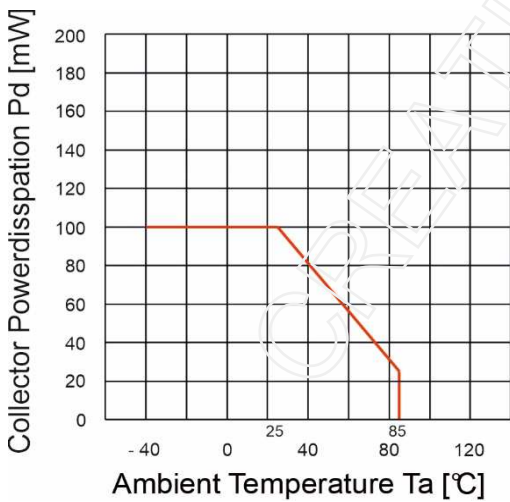
Relative Radiation Sensitivity

@ T_{ambient} = 25°C



Collector Powerdissipation vs. Ambient Temperature

Relative Sensitivity vs. Wavelength

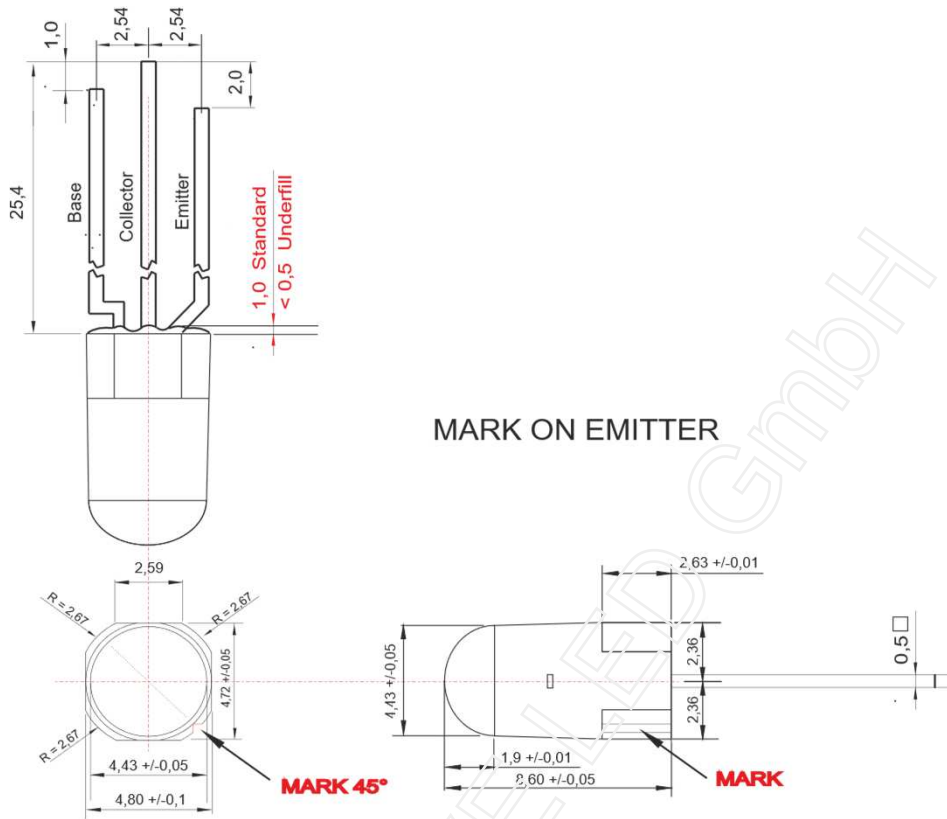


Pls. Contact us for more technical detail information !

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.

CSR68521PDK

Mechanical Drawing



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