CREATIVE GMBH LED

Preliminary Product Specification

Phototransistor 30° CSR38461PFK

* 4,8mm Phototransistor with separate Base for general purpose
* Mountable in row with 5mm distance
* Response Angle of typ. 30 degree
* Daylight filtered black housing
* Mechanical matched with CQR- LED-Serie
* SMT-Version CSS38461PFK
* Current Gain selected

Optical and Electrical Characteristics @Tambient =25°C

Symbol	Parameter	MIN	Typ	MAX	UNIT	Test conditions
I_{Light}	Collector Light Current	2	3,5		mA	Ee = 0,5mW/cm² @940nm ; Vr=10V
I_{CEO}	Collector Dark Current		2		nA	Ee = 0 mW/cm² ; Vr=10V
$V_{(BR)CEO}$	Collector Emitter Breakdown Voltage	30			V	Ic = 100µA ; H = 0mW/cm²
$V_{(BR)ECO}$	Emitter Collector Breakdown Voltage	5			V	Ic = 100µA ; H = 0mW/cm²
V_{CEsat}	Collector-Emitter Saturation Voltage		0,3		V	Ib = 100µA ; H = 0mW/cm²
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		30		deg.	ΦE = 50%
ß	Current Gain	500		1000		Ee = 0,5mW/cm² @940nm ; Vr=10V
A	Active Array		0,146		mm²	
t_f	Fall Time		15		µS	Vcc = 5V ; Ic = 1mA ; RL = 1KΩ
t_r	Rise Time		15		µS	Vcc = 5V ; Ic = 1mA ; RL = 1KΩ
$T_{Operating}$	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	Tamb 25°C

Order informations:

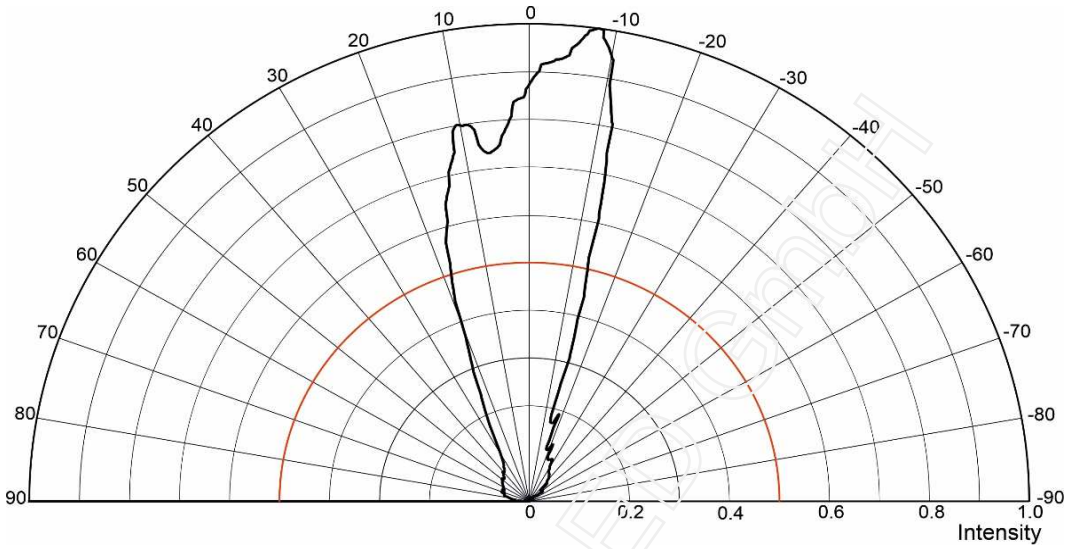
CSR38461PFK	Bulk
CSR38461PFK-TC	Bended according to customer specifications (on request)
CSR38461PFK-TR	Tape & Reel (1000pcs/reel) on request

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.

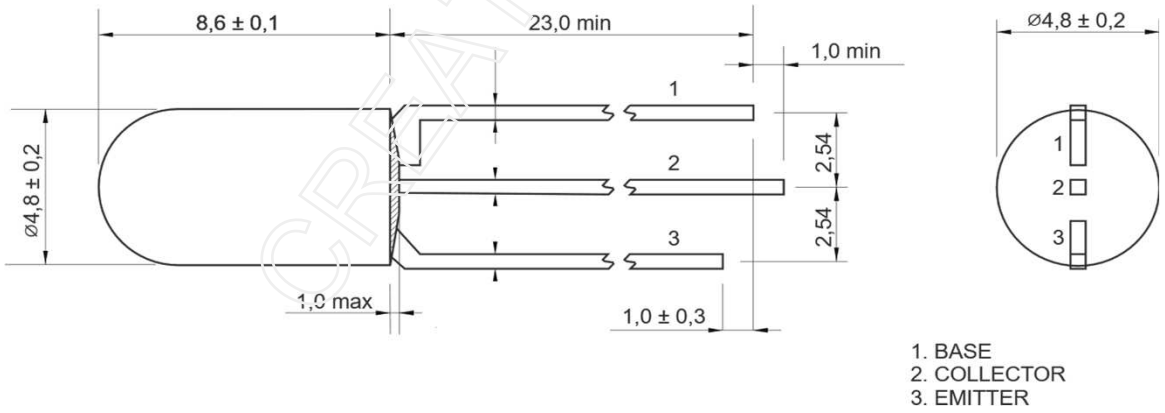
CSR38461PFK

Relative Responsitivity Angle

@ $T_{ambient}$ = 25°C



Mechanical Drawing



1. BASE
2. COLLECTOR
3. EMITTER

Pls. Contact us for more technical detail information !

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