

#### **Preliminary Product Specification**

### **Phototransistor**

30°

CSR38481PFK

- \* 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 CSS38481PFK
- \* Current Gain selected



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

Symbol	Parameter	MIN	Тур	MAX	UNIT	Test conditions
l <sub>Light</sub>	Collector Light Current	3,2	5		mA	Ee = 0,5mW/cm² @940nm ; Vr=10V
I <sub>CEO</sub>	Collector Dark Current		2	//	nA	Ee = 0 mW/cm² ; Vr=10V
V <sub>(BR)CEO</sub>	Collector Emitter Breakdown Voltage	30			V	Ic = 100μA ; H = 0mW/cm²
V <sub>(BR)ECO</sub>	Emitter Collector Breakdown Voltage	5	11 1		V	Ic = 100μA ; H = 0mW/cm²
V <sub>CEsat</sub>	Collector-Emitter Saturation Voltage		0,3		V	lb = 100μA ; H = 0mW/cm²
λ <sub>peak</sub>	Wavelength of Peak Sensitivity		860		nm	max. sensitivity
λ <sub>0,5</sub>	Range of Spectral Bandwidth	700	7	1150	nm	I = 10%, typical
2Ф <sub>0,5</sub>	Full Response Angle		30		deg.	ΦE = 50%
ß	Current Gain	1000		1800		Ee = 0,5mW/cm² @940nm ; Vr=10V
Α	Active Array	7	0,146		mm²	
t <sub>f</sub>	Fall Time		15		μS	Vcc = 5V ; Ic = 1mA ; RL = 1KΩ
t r	Rise Time		15		μS	Vcc = 5V ; Ic = 1mA ; RL = 1KΩ
T <sub>Operating</sub>	Operating Temperature	-25		85	°C	
T <sub>Storage</sub>	Storage Temperature	-25		85	°C	
T <sub>Soldering</sub>	Soldering Temperature			260	°C	Iron Soldering; 5mm from case @ max 5 sec.
R <sub>thJA</sub>	Thermal Resistance		450		K/W	
P tot	Total Power Dissipation			100	mW	Tamb 25°C

### **Order informations:**

CSR38481PFK Bulk

CSR38481PFK-TC Bended according to customer specifications (on request)

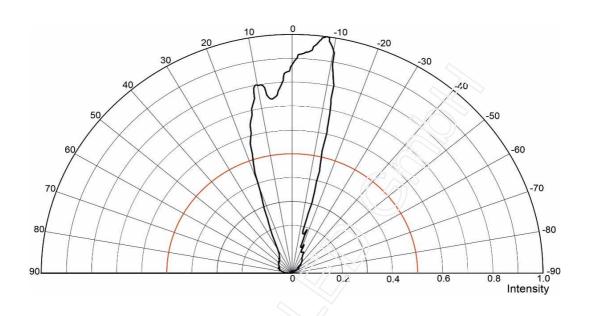
CSR38481PFK-TR Tape & Reel ( 1000pcs/reel) on request

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.

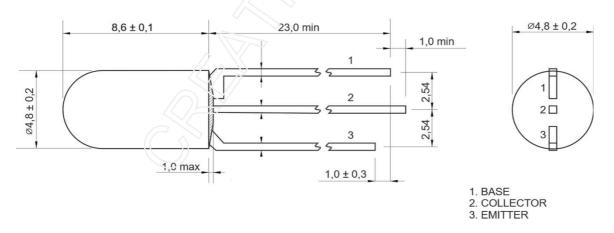


# **Relative Responsitivity Angle**

@ T<sub>ambient</sub> = 25°C



# **Mechanical Drawing**



Pls. Contact us for more technical detail information!

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