

Product Specification**Phototransistor****40°****CSR68511PHK**

- * Phototransistor with separate Base for general purpose
- * Mountable in row with 5mm distance
- * **Response Angle of typ. 40°**
- * Daylight filtered black housing
- * Mechanical matched with CQR6x LED-serie
- * SMT-Version CSS68511PHK
- * Current Gain selected

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

| Symbol | Parameter | MIN | Typ | MAX | UNIT | Test conditions |
|------------------|--------------------------------------|------|-------|------|-----------------|--|
| I_{Light} | Collector Light Current | 2,4 | 3,9 | | mA | $E_e = 0,5mW/cm^2 @940nm ; V_r=10V$ |
| I_{CEO} | Collector Dark Current | | | 100 | 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 | | 860 | | nm | max. sensitivity |
| $\lambda_{0,5}$ | Range of Spectral Bandwidth | 700 | | 1150 | 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 | 1000 | | 1800 | | $V_{ce} = 5 V ; I_c = 2mA$ |
| $2\Phi_{0,5}$ | Full Response Angle | | 40 | | deg. | $\Phi E = 50\%$ |
| C_{CEO} | Collector Emitter Capacitance | | 6 | | pF | $V_R = 5V ; f = 1Mhz ; E_e = 0mW/cm^2$ |
| $T_{Operating}$ | 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:

CSR68511PHK

Bulk (1000 pcs./Bag - standard)

CSR68511PHK-TC

Bended according to customer specification (on request)

CSR68511PHK-TR

Reel taped (1000 pcs./reel)

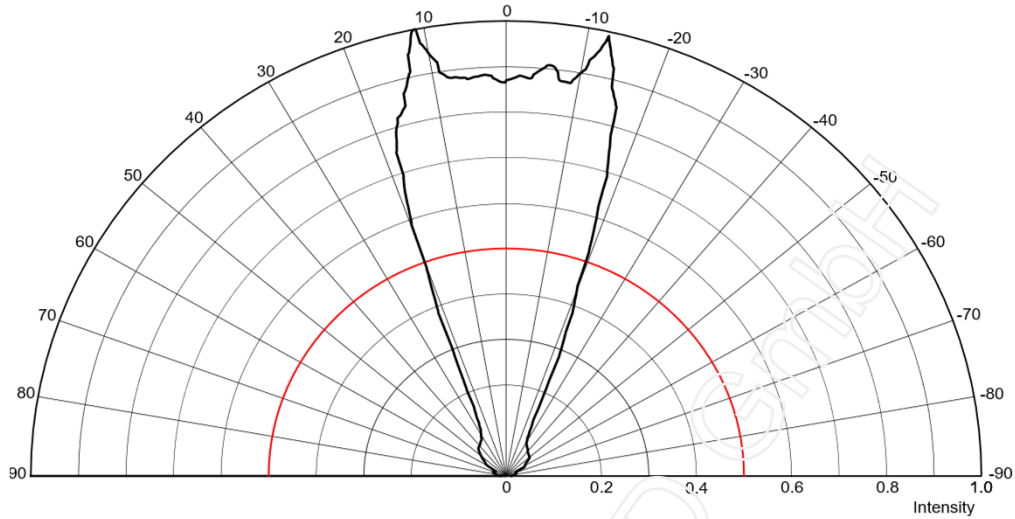
CSR68511PHK-CT1.6

Lead length 1.6mm cutted (standard)

CSR68511PHK

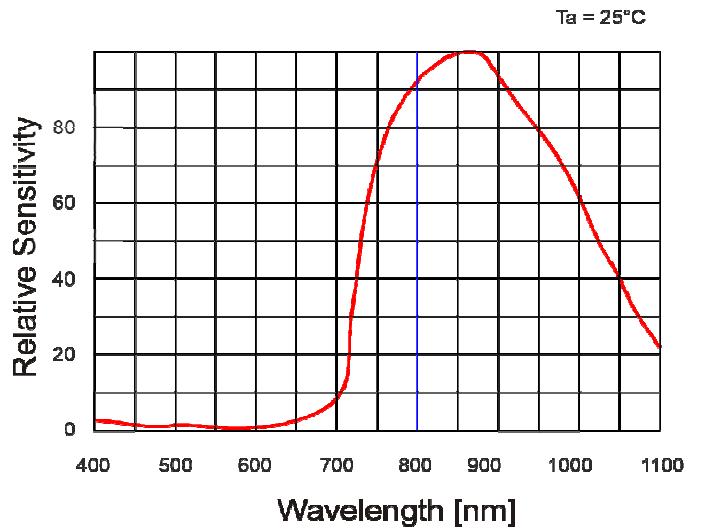
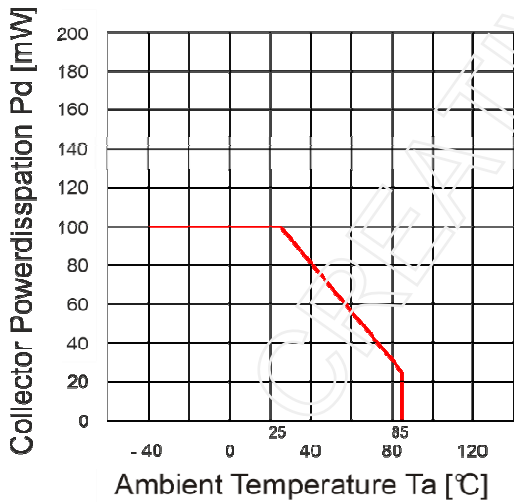
Relative Radiation Sensitivity

@ T_{ambient} = 25°C



Collector Powerdissipation vs. Ambient Temperature

Relative Sensitivity vs. Wavelength

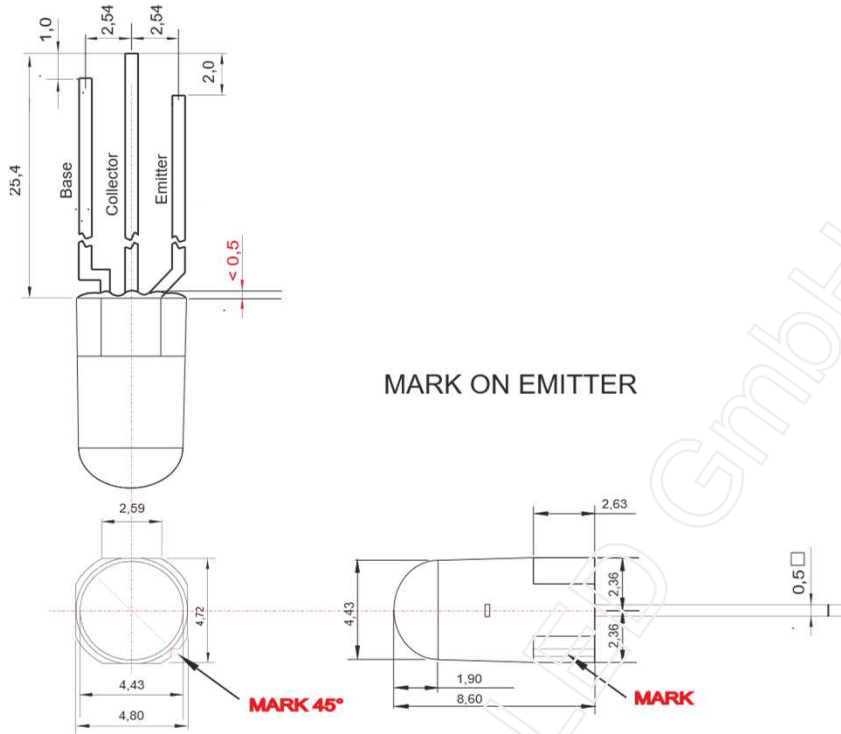


Pls. Contact us for more technical detail information !

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.

CSR68511PHK

Mechanical Drawing



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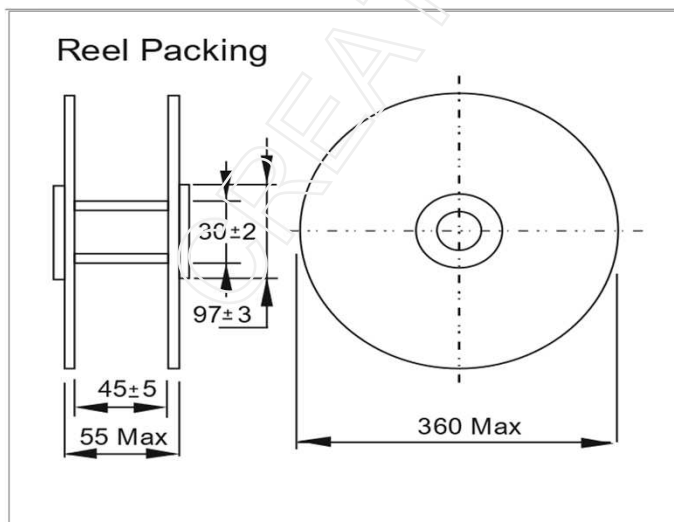
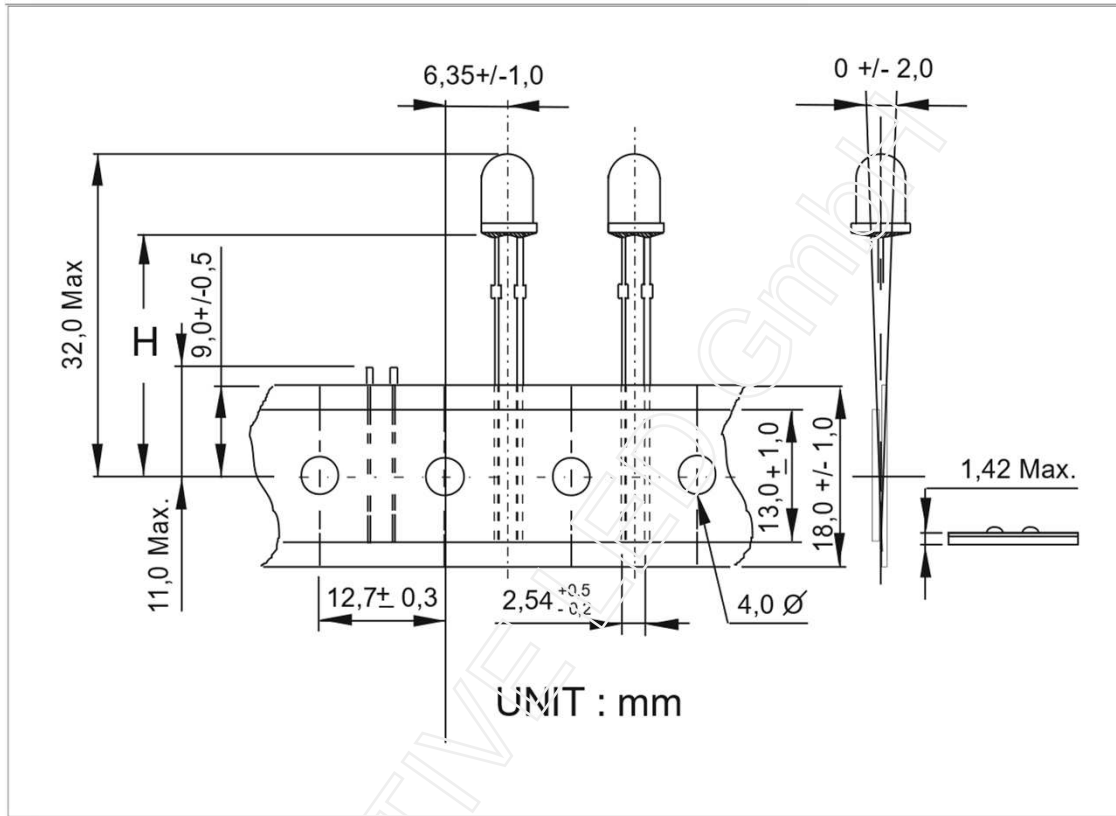
CSR68511PHK

Taping Dimensions :

Pitch : 2,54mm STRAINGHT LEAD

REMARK :

1. The dimensions of H may be different among various models
2. Quantity per reel for 3mm: 2000pcs.; 5mm : 1000 pcs.
3. Unless specially requested, outgoing first lead is ANODE



| Option Code | H* / - 0,5 |
|-------------|------------|
| R01 | 18,0 |
| R11 | 19,0 |
| R21 | 20,0 |
| R31 | 21,0 |
| R41 | 22,0 |
| R51 | 23,0 |
| R61 | 24,0 |
| R71 | 25,0 |
| R81 | 26,0 |