

Product Specification**Phototransistor****40°****CSR68501PHK**

- * 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 CSS68501PHK
- * Current Gain selected

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

Symbol	Parameter	MIN	Typ	MAX	UNIT	Test conditions
I_{Light}	Collector Light Current	2,1	3,5		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	800		1300		$V_{ce} = 5V ; I_c = 2mA$
$2\Phi_{0,5}$	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	$T_{amb} 25^\circ C$

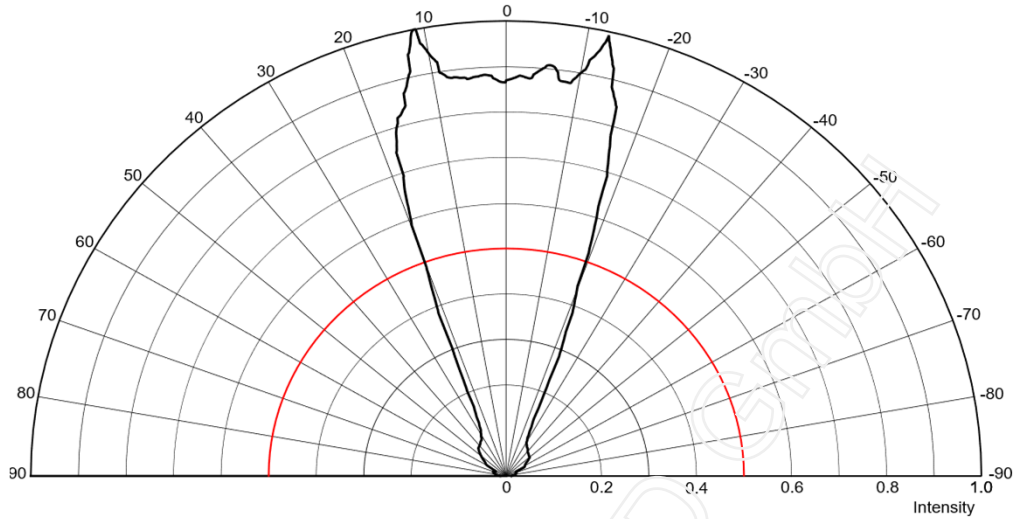
Order informations:

CSR68501PHK	Bulk (1000 pcs./Bag - standard)
CSR68501PHK-TC	Bended according to customer specification (on request)
CSR68501PHK-TR	Reel taped (1000 pcs./reel)
CSR68501PHK-CT1.6	Lead length 1.6mm cutted (standard)

CSR68501PHK

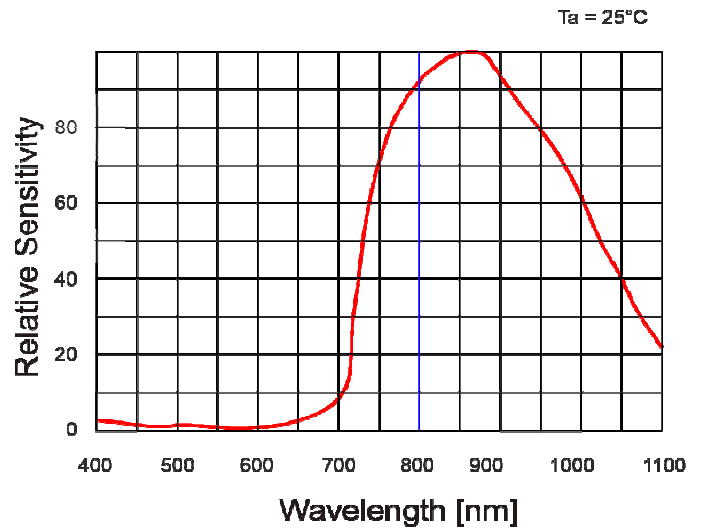
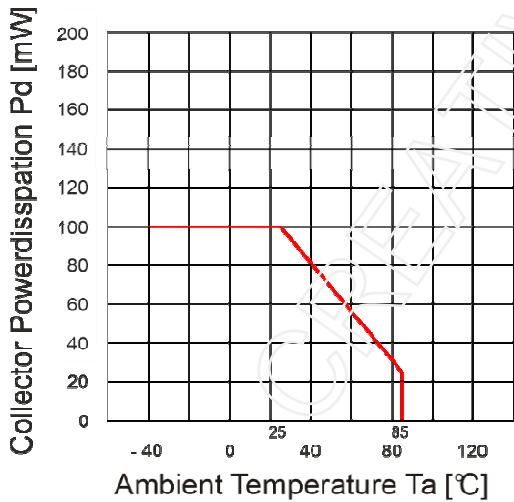
Relative Radiation Sensitivity

@ T_{ambient} = 25°C



Collector Powerdissipation vs. Ambient Temperature

Relative Sensitivity vs. Wavelength

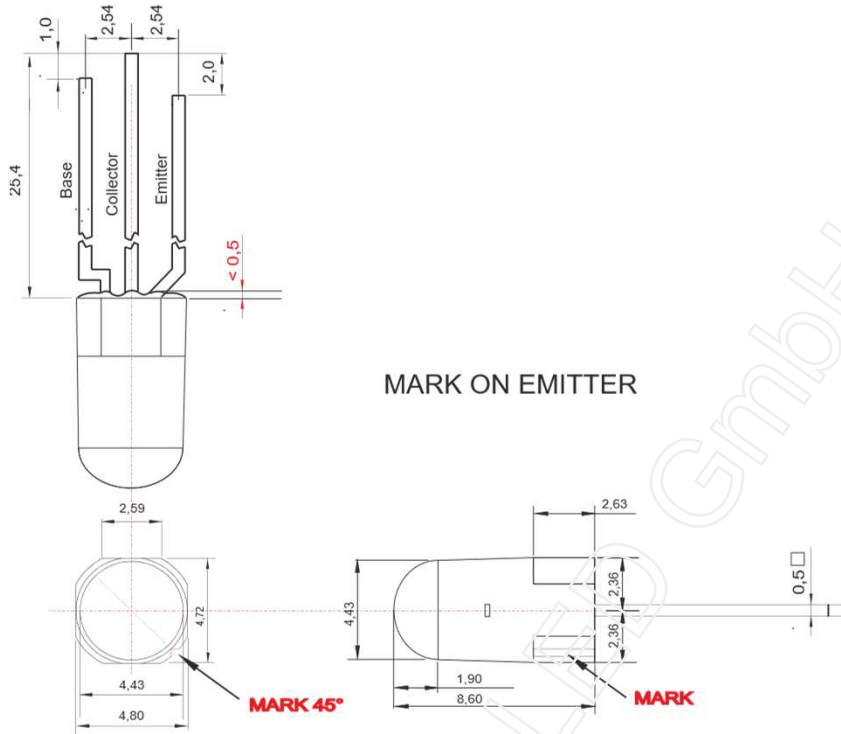


Pls. Contact us for more technical detail information !

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.

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Mechanical Drawing



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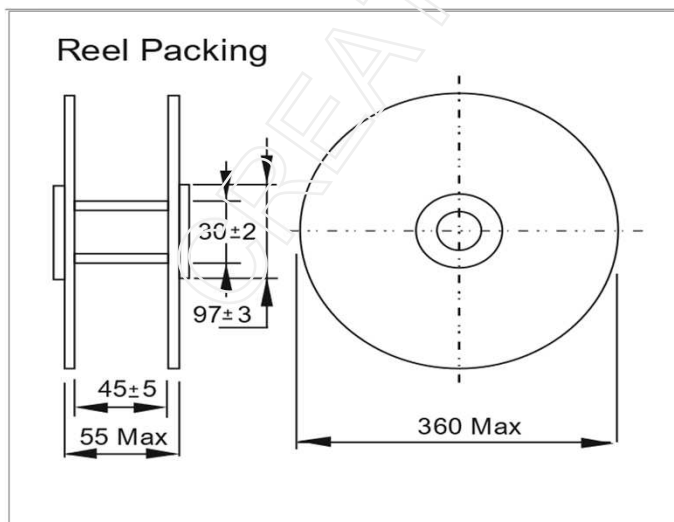
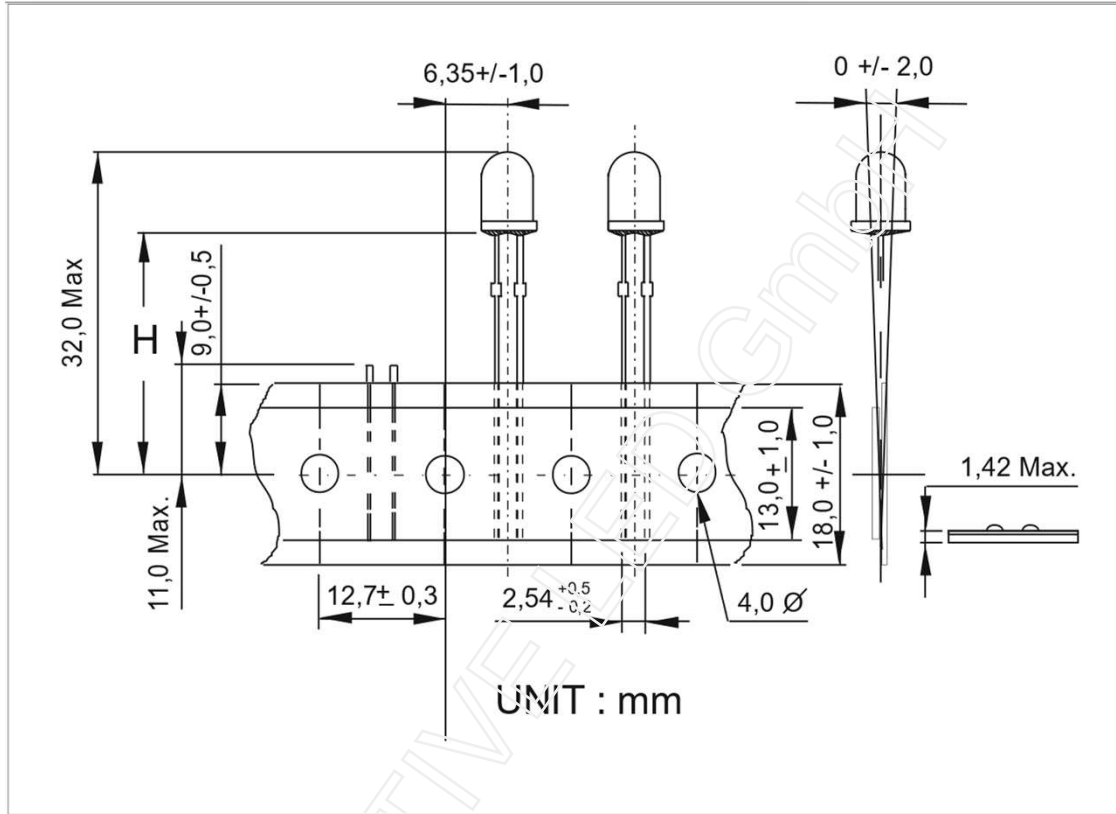
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Taping Dimensions :

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