

**PIN-Photodiode THD****40°****CSR57581PHH**

- \* PIN-Photodiode for general purpose  
Based on Silicon- Photodiode
- \* Mountable in row with 5mm distance
- \* **Response Angle of typ. 40 degree  
with tapered tip,  $2\Phi_{0,9} \approx 15$  degree typ.**
- \* High responsivity with typ. 0,55 A/W
- \* Daylight filtered black housing
- \* Mechanical matched with CQR5- LED-serie
- \* Bended version on request  
SMT-Version CSS57581PHH

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

Symbol	Parameter	MIN	Typ	MAX	UNIT	Test conditions
$I_{Light}$	Reverse Light Current	60	85		$\mu A$	$E_e = 1mW/cm^2 @940nm ; V_r=10V$
$I_{Dark}$	Reverse Dark Current		2	5	nA	$E_e = 0 mW/cm^2 ; V_r=10V$
$I_{Short}$	Short Circuit Current		12		$\mu A$	$E_e = 1mW/cm^2 @940nm ; V_r=10V$
$V_R$	Reverse Voltage	25			V	
$V_{forward}$	Reverse Breakdown Voltage	25			V	$I_R = 100\mu A ; E_e = 0mW/cm^2$
$V_{OC}$	Open Circuit Voltage		410		mV	$E_e = 5mW/cm^2 @940nm$
$\lambda_{peak}$	Wavelength of Peak Sensitivity		860		nm	max. sensitivity
$\lambda_{0,5}$	Range of Spectral Bandwidth	720		1100	nm	$I = 10\%$ , typical
$2\Phi_{0,5}$	Full Response Angle		40	45	deg.	$\Phi E = 50\%$
A	Active Array		1,55		mm <sup>2</sup>	
$t_f$	Fall Time		10		$\mu S$	$V_R = 10V ; R_L = 1K\Omega$
$t_r$	Rise Time		10		$\mu S$	$V_R = 10V ; R_L = 1K\Omega$
$C_J$	Junction Capacity		4	6	pF	$V_R = 5V ; f = 1Mhz ; E_e = 0mW/cm^2$
$T_{Operating}$	Operating Temperature	-40		85	°C	
$T_{Storage}$	Storage Temperature	-40		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			100	mW	$T_{amb} 25^\circ C$

**Order informations:**

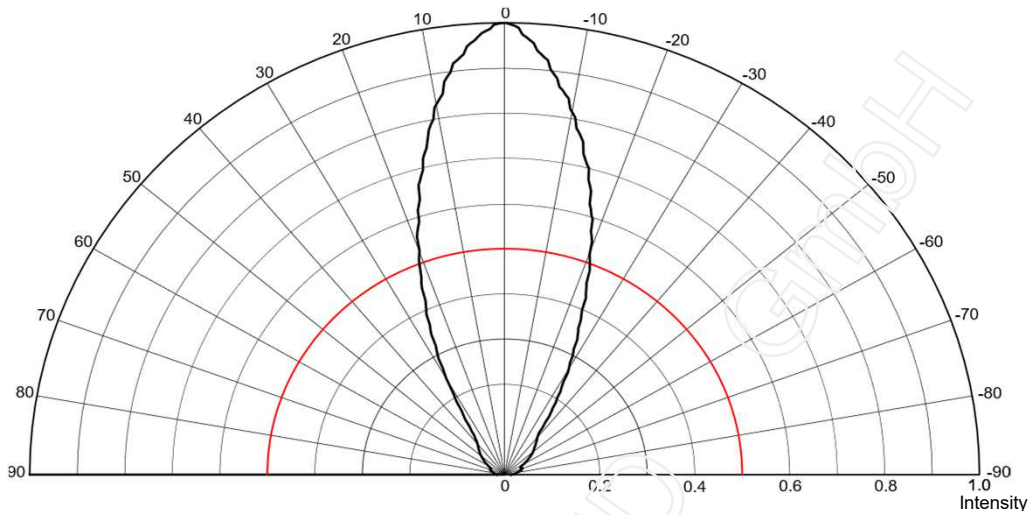
CSR57581PHH                      Bulk  
 CSR57581PHH-TR              Tape & Reel (1500pcs/reel ) on request  
 CSR57581PHH-TC              Bended according to customer specifications ( on request )

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.

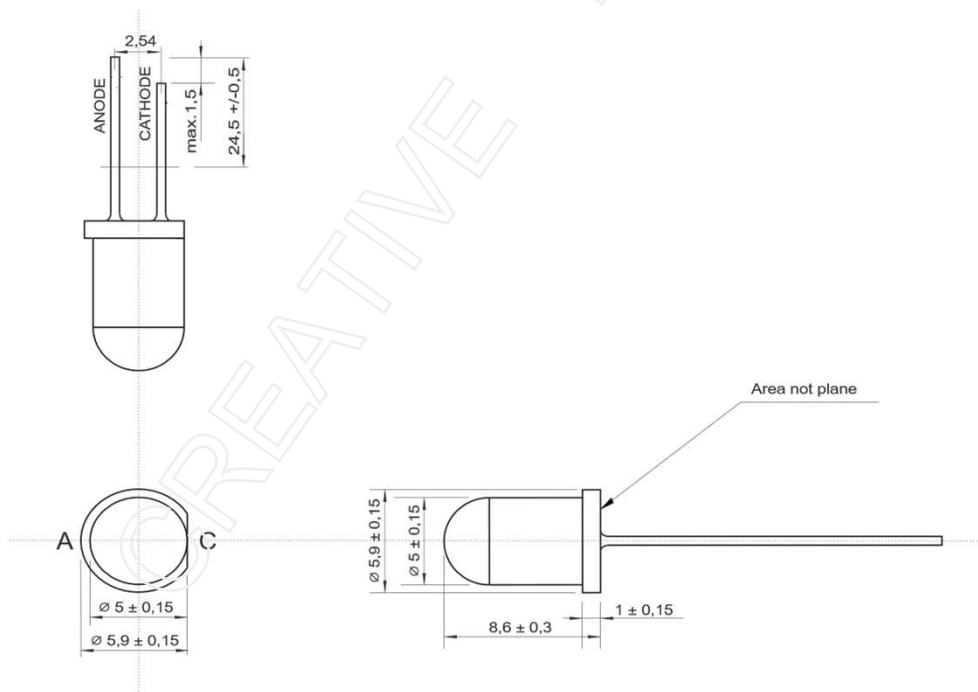
# CSR57581PHH

## Relative Responsivity Angle

@  $T_{\text{ambient}} = 25^{\circ}\text{C}$



## Mechanical Drawing



**Pls. Contact us for more technical detail information !**

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