

### **LED SPECIFICATION**

Part No.: <u>510E850C</u>

#### Ø Features:

- I Single color
- I High Power output
- I Low power consumption
- I High reliability and long life

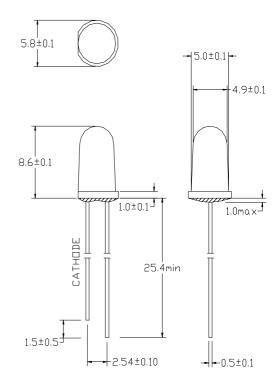
#### Ø Descriptions:

I Dice material: AlGaAs

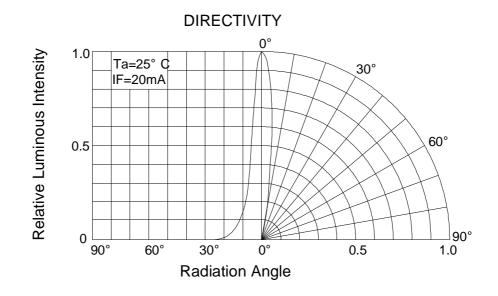
I Emitting Color: Infrared Emitting diodes

I Lens Type: Black Transparent

#### Ø Directivity:



●Tolerance is +/-0.25mmunless otherivise noted





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## Ø Absolute maximum ratings (Ta = $25^{\circ}$ C)

Parameter	Symbol	Test Conditions	Characteristics		I Init	
			Min.	Max.	Unit	
Power Dissipation	$P_d$			100	mW	
Reverse Voltage	$V_R$	I <sub>R</sub> =10 μ A	9		V	
Forward Current	$I_{FM}$	Duty=0.01mS 1kHz		1000	mA	
Operating Temperature Range	$T_{ m opr}$		-40	+85	$^{\circ}$	
Storage Temperature Range	$T_{\rm str}$		-40	+100	$^{\circ}$	
Soldering Temperature	$T_{sd}$	t≤5sec,2mm from case		260	$^{\circ}$	

# Ø Electrical and optical characteristics (Ta = 25 $^{\circ}$ C)

Parameter	Symbol	Test Condition	Value			Unit
			Min.	Тур.	Max.	Offic
Forward Voltage	VF	IF = 50mA		1.55	1.8	V
Reverse Current	IR	VR = 9V			10	μА
Peak Wavelength	λр	IF = 50mA		850		nm
Spectrum Width of Half Value	Δλ	$I_F = 50 \text{mA}$		45		nm
Radiant Intensity	Ie	I <sub>F</sub> =50mA		160		mW/Sr
Viewing Angle	<b>2</b> θ 1/2	IF = 50mA		13		Deg.

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## Ø Typical electrical/optical characteristic curves:

