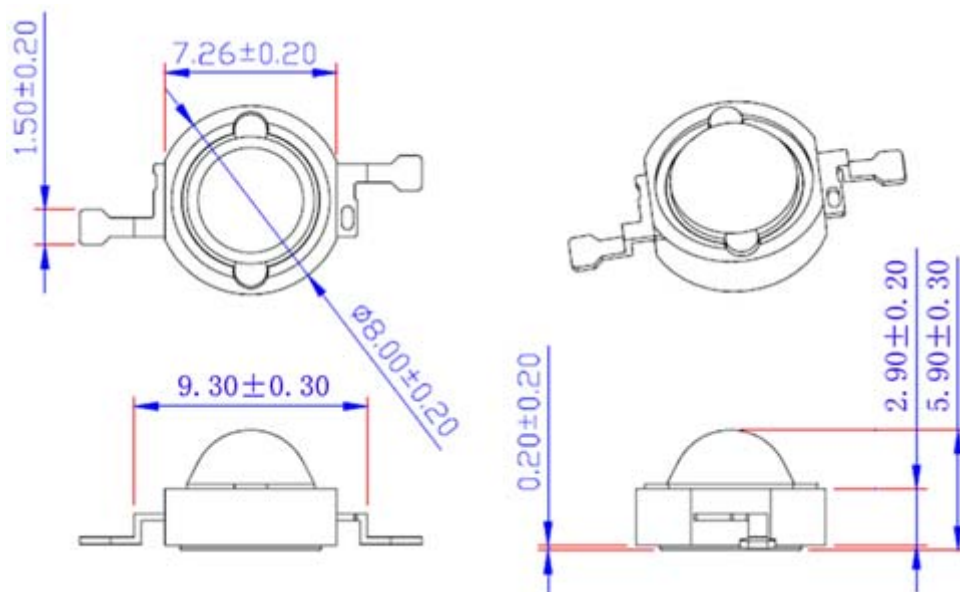


Features

- ◆ High radiant intensity
- ◆ Peak wavelength: $\lambda_p=850\text{nm}$
- ◆ High reliability

Package Dimension:



Part No.	Chip Material	Lens Color	Source Color
<u>850IRPC/D40</u>	GaAlAs	Water clear	Infrared

Notes:

1. All dimensions are in millimeters.
2. Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.
3. Protruded resin under flange is 1.0mm max.

Approved By:

Designed By: Eason

Model No: **850IRPC/D40**

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	MAX	Unit
Power Dissipation at(or below) 25 °C free air temperature	P _d	700	mW
Peak Forward Current (Pulse width=100 μ s t _p /T=0.01)	I _{FP}	1000	mA
Continuous Forward Current	I _F	450	mA
Reverse Voltage	V _R	5	V
Operating Temperature Range	T _{opr}	-25°C to +70°C	
Storage Temperature Range	T _{stg}	-25°C to +85°C	
Lead Soldering Temperature	T _{sol}	260°C for 5 seconds	

Electrical Optical Characteristics at Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Radiant Intensity	E _e	40	65	-----	Mw/sr	I _F =350mA
Viewing Angle	2 θ _{1/2}	----	120	-----	Deg	
Peak Emission Wavelength	λ _p	----	850	----	nm	I _F =350mA
Spectral Line Half-Width	Δ λ	----	50	----	nm	I _F =350mA
Forward Voltage	V _F	1.45	1.55	1.70	V	I _F =350mA
Reverse Current	I _R	----	----	50	μ A	V _R =5V

Model No: 850IRPC/D40

Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

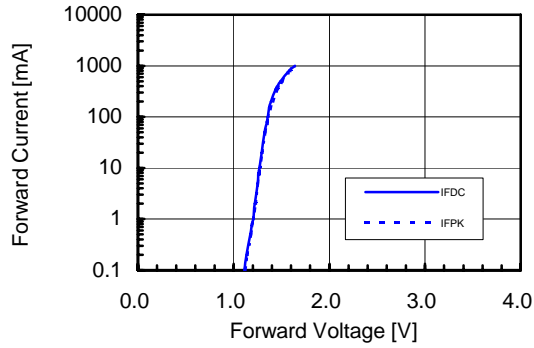


Fig 2. Relative Radiant Power vs. Wavelength

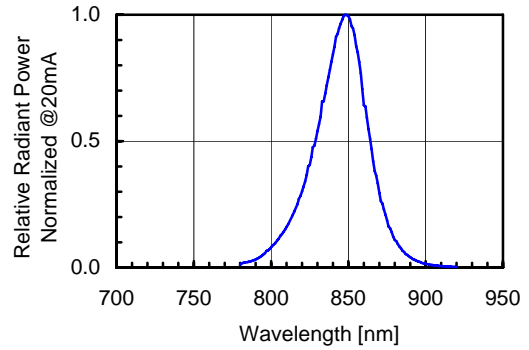


Fig 3. Relative Radiant Power vs. Forward DC Current

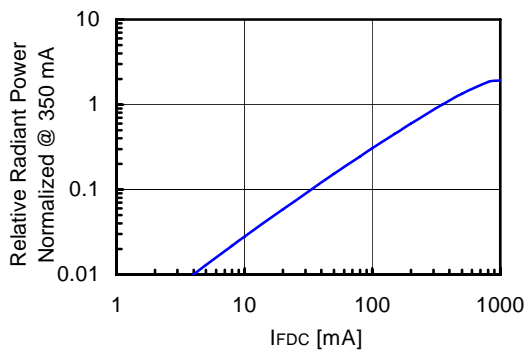


Fig4. Relative Radiant Intensity vs. Angular Displacement

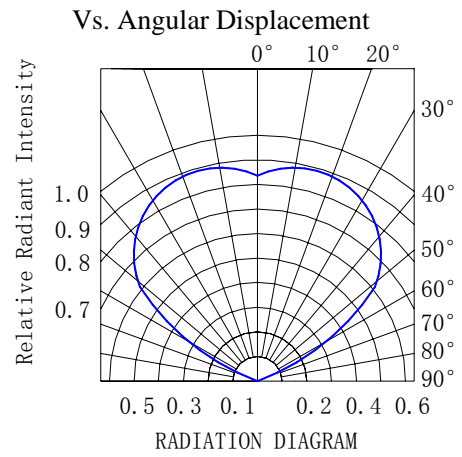


Fig 5. Forward DC Voltage vs. Temperature

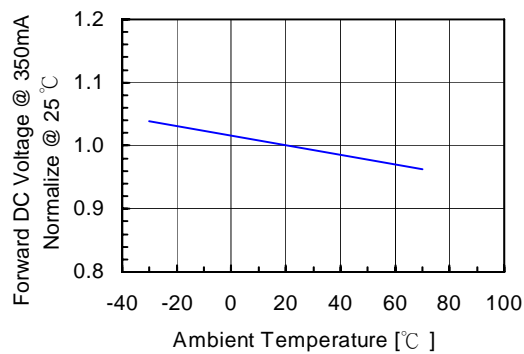


Fig 6. Relative Radiant Power vs. Temperature

