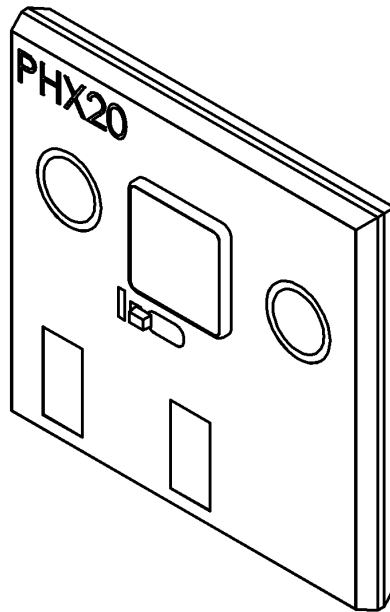


IRCOB9-2827-1450-60-001



IRCOB9-2827-1450-60-001

1450nm HIGH POWER LED



Features

- Chip size : 1.0×1.0mm
- Number of Chips : 9pcs
- Peak Wavelength : 1450nm
- Optical efficiency (typ.) : 125mW
- Viewing half angle : 60°
- Package : Copper substrate
- Lens : Silicone Resin

Applications

- Machine Vision System
- Light source for in-vehicle camera
- Infrared data communication

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Maximum Ratings (Tc=25°C)

Parameter	Symbol	Values	Unit
Power Dissipation	P _D	12.15	W
Forward Current	I _F	4.5	A
Reverse Voltage	V _R	5	V
Junction Temperature	T _j	120	°C
Operating Temperature	T _{opr}	-40~85	°C
Storage Temperature	T _{stg}	-40~85	°C
Thermal Resistance	R _{thja}	1.5	K/W

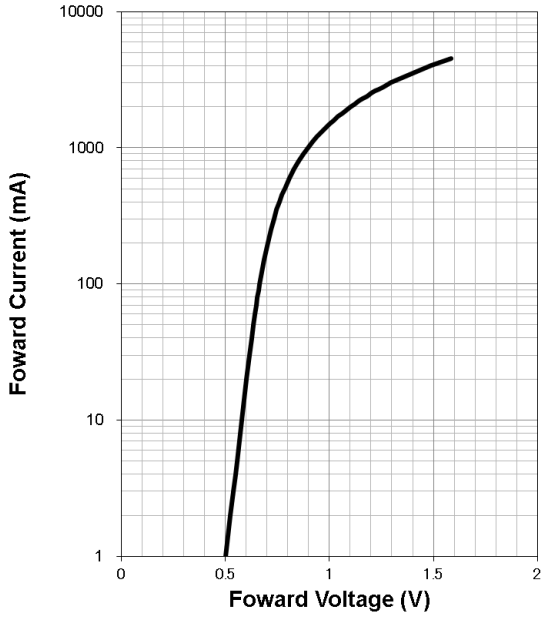
※Soldering condition : Soldering condition must be completed with 10 seconds at below 260°C

Optical and Electrical Characteristics (Tc=25°C)

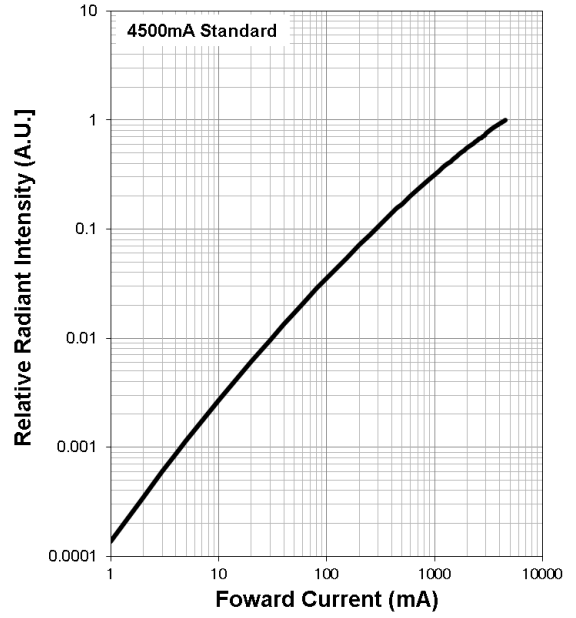
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward Voltage	V _F		1.7	2.7	V	I _F =4.5A
Radiated Power	P _O		125		mW	I _F =4.5A
Peak Wavelength	λ _p		1450		nm	I _F =4.5A
Half Width	Δλ		90		nm	I _F =4.5A
Viewing Half Angle	θ 1/2		±60		deg	I _F =1A

Typical Characteristic Curves

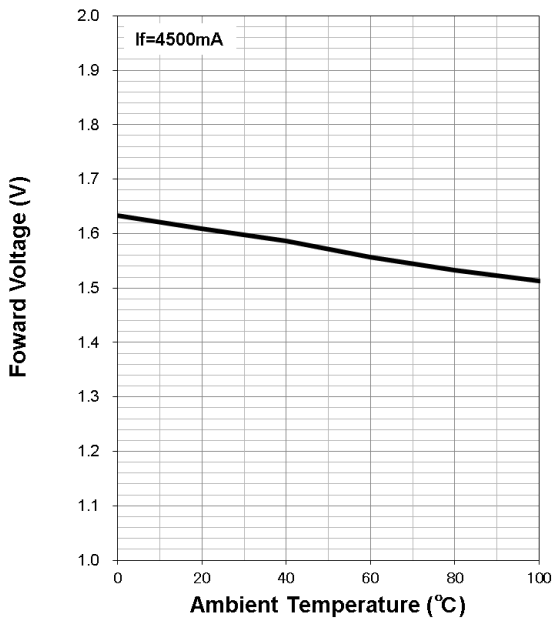
Forward Voltage - Forward Current



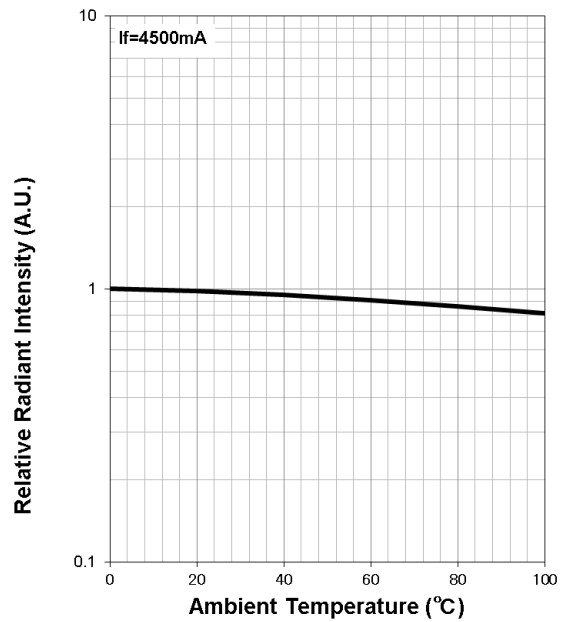
Forward Current - Relative Radiant Intensity



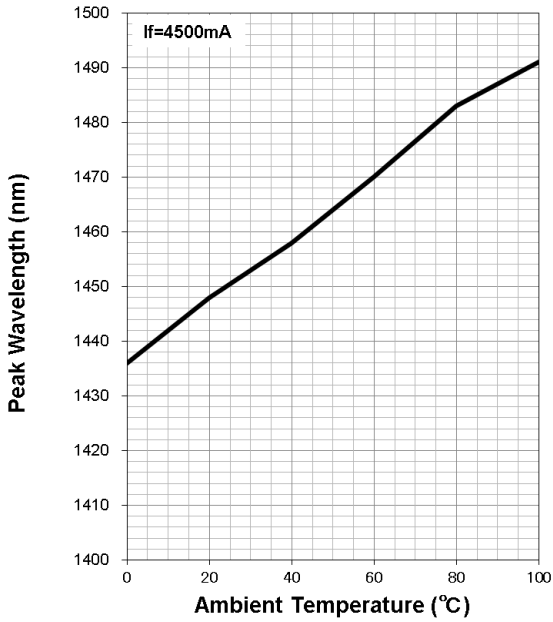
Ambient Temperature - Forward Voltage



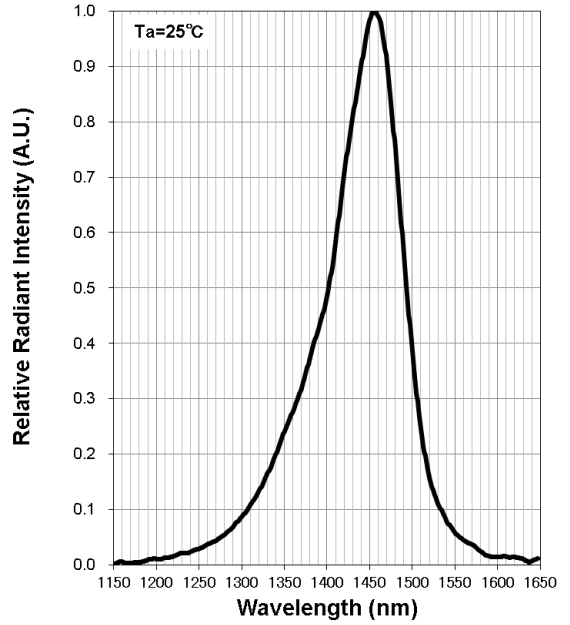
Ambient Temperature - Relative Radiant Intensity



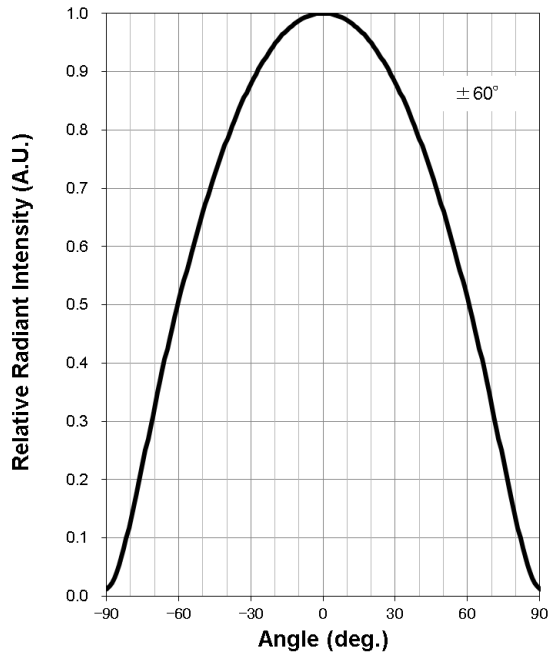
Ambient Temperature - Peak Wavelength



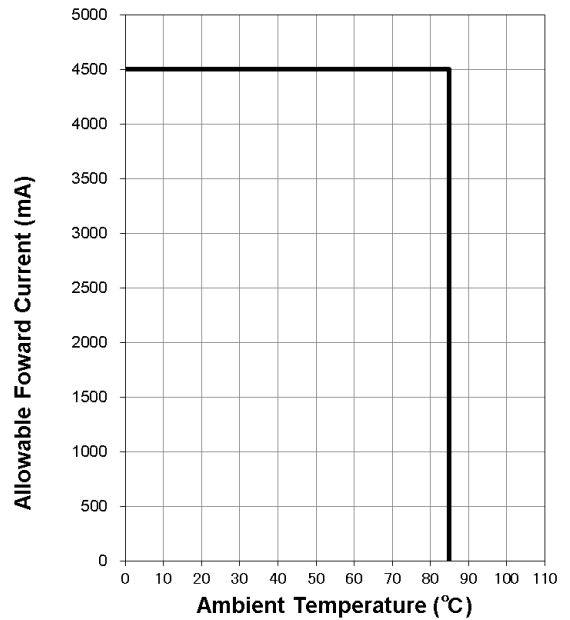
Relative Spectrum Emission



Radiation Characteristics

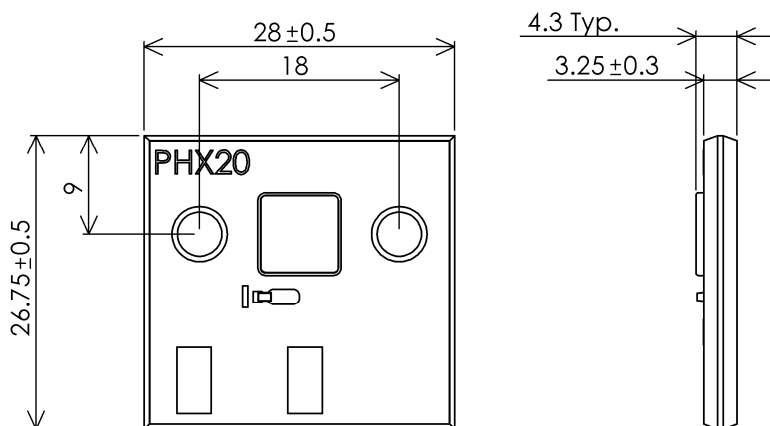


Ambient Temperature - Allowable Forward Current



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Outline



Dec. 2018