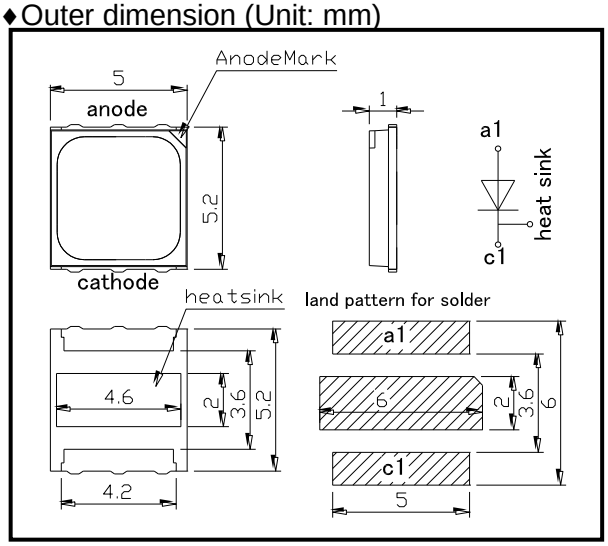
IR 1550NM Series

These devices are available to be operated and 32mW at IFP=1A.

♦Specifications

1) Product Name	Infrared LED Light Emitter
2) Type No.	IR 1550NM
3) Chip	
(1) Chip Material	InGaAsP
(2) Chip Dimension	1000um*1000um
(3) Chip Number	1pcs
(4) Peak Wavelength	1550nm typ.
4) Package	
(1) Lead Frame Die	Silver Plated on Copper
(2) Package Resin	PPA Resin
(3) Lens	Silicone Resin

♦Outer dimension (Unit: mm)



♦Absolute Maximum Ratings [Ta=25°C]

Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	P_D	650	mW
Forward Current	I_F	500	mA
Pulse Forward Current	I_{FP}	1000	mA
Reverse Voltage	V_R	5	V
Thermal Resistance	R_{thja}	10	K/W
Junction Temperature	T_j	120	°C
Operating Temperature	T_{OPR}	-40 ~ +100	°C
Storage Temperature	T_{STG}	-40 ~ +100	°C
Soldering Temperature	T_{SOL}	250	°C

‡Pulse Forward Current condition: Duty=1% and Pulse Width=10us.

‡Soldering condition: Soldering condition must be completed within 5 seconds at 250°C

♦Electro-Optical Characteristics [Ta=25°C typ.]

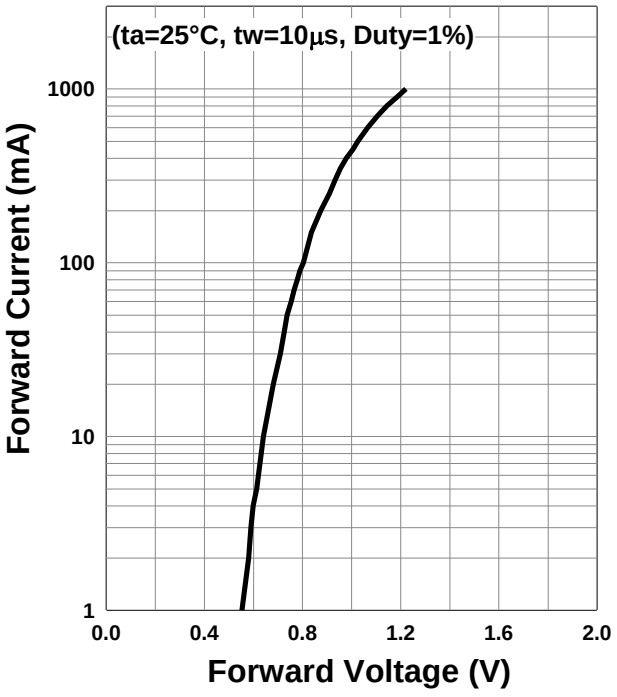
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V_F	500mA		1.0	1.3	V
Radiated Power	P_O	I500mA		16		mW
Radiant Intensity	I_E	500mA		15		mW/sr
Peak Wavelength	λ_P	500mA		1550		nm
Half Width	$\Delta\lambda$	500mA		120		nm
Viewing Half Angle	$\theta_{1/2}$	100mA		±68		deg.

‡Radiated Power is measured by G8370-85.

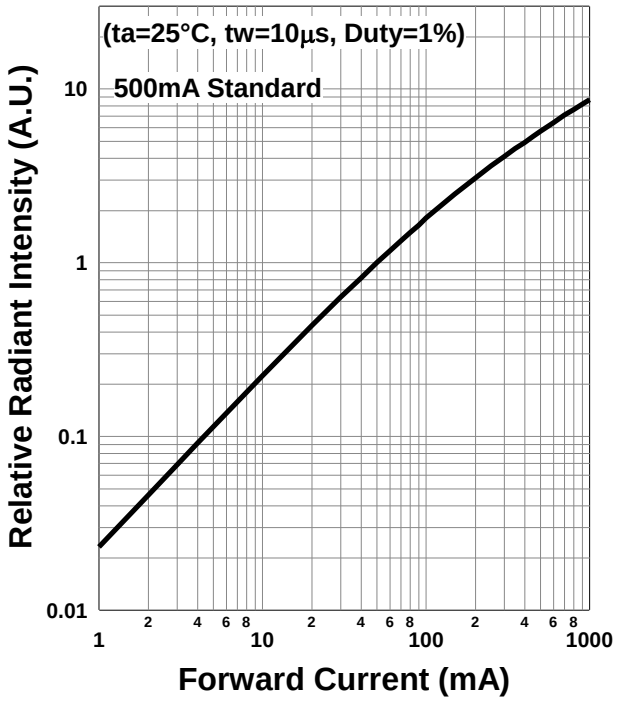
‡Radiant Intensity is measured by ANDO Optical Multi Meter AQ2140 & AQ2743.

Larson Electronics LLC
9419 US-175 Kemp, Tx 75143
903-498-3363, 903-498-3364 (Fax), sales@larsonelectronics.com

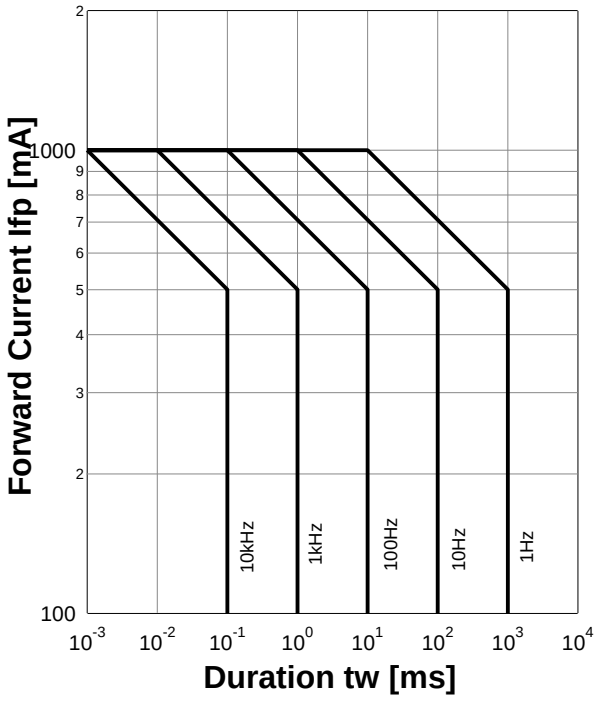
Forward Curent - Forward Voltage



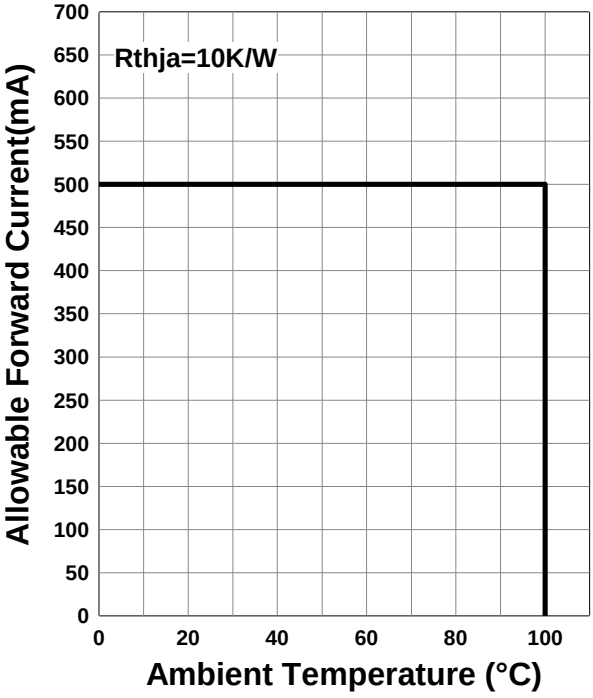
Relative Radiant Intensity - Forward Current



Forward Current - Pulse Duration

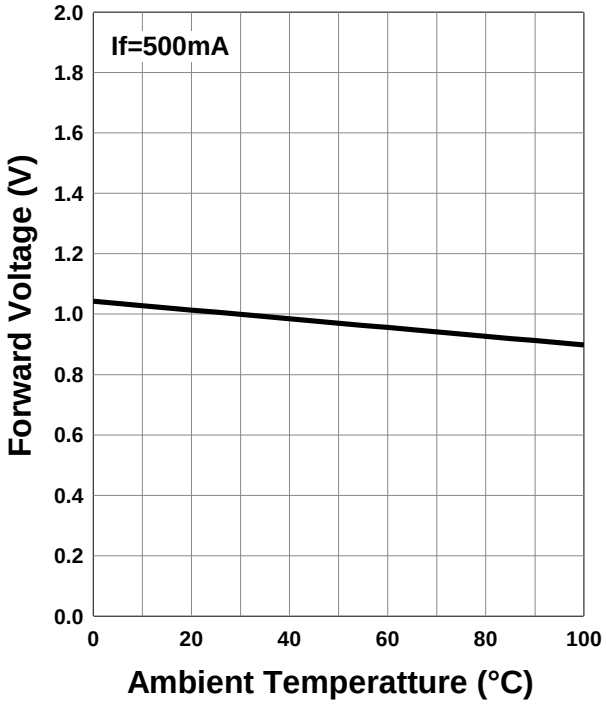


Allowable Forward Current - Ambient Temperature

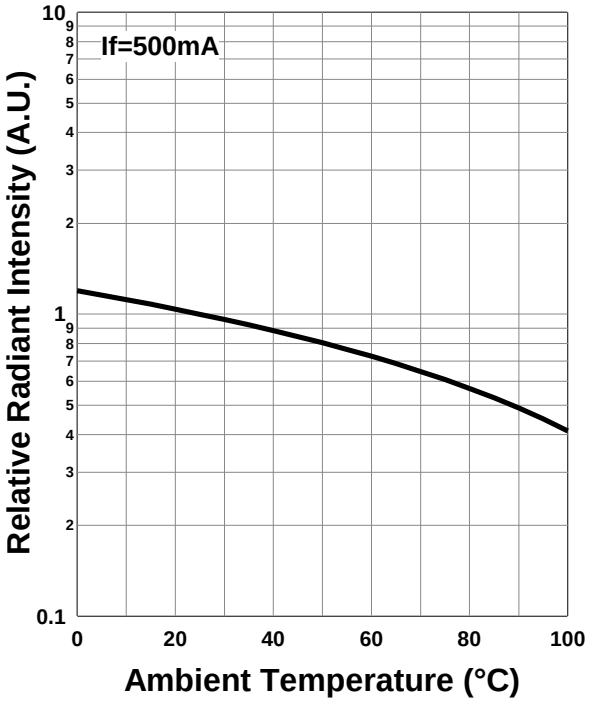


Larson Electronics LLC
9419 US-175 Kemp, Tx 75143
903-498-3363, 903-498-3364 (Fax), sales@larsonelectronics.com

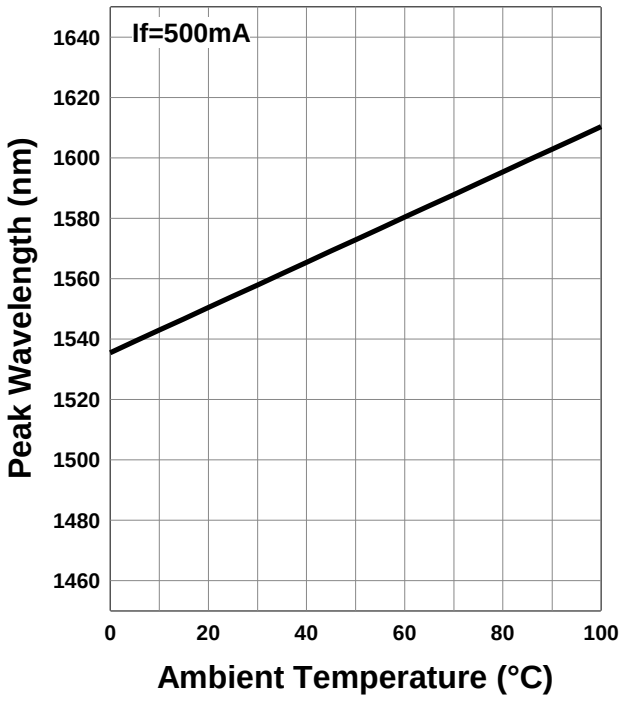
Forward Voltage - Ambient Temperture



Relative Radiant Intensity - Ambient Temperature

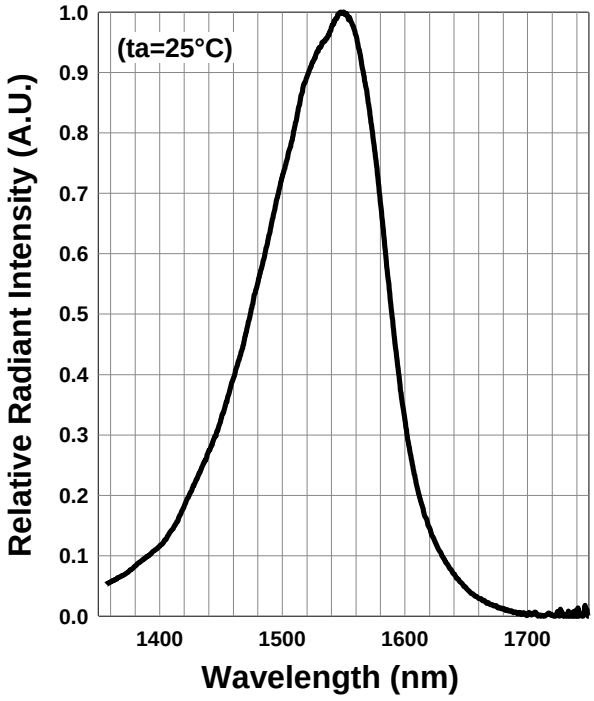


Peak Wavelength - Ambient Temperature

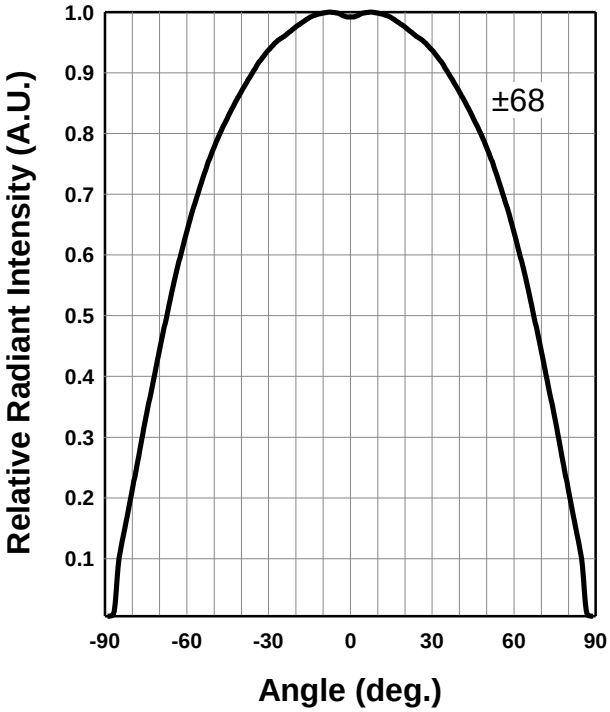


Larson Electronics LLC
9419 US-175 Kemp, Tx 75143
903-498-3363, 903-498-3364 (Fax), sales@larsonelectronics.com

Relative Spectral Emission



Radiation Characteristics



Larson Electronics LLC
9419 US-175 Kemp, Tx 75143
903-498-3363, 903-498-3364 (Fax), sales@larsonelectronics.com