

# L1550-35         High Power InGaAsP NIR LED

L1550-35         is an InGaAsP LED mounted on a metal stem and covered with epoxy resin or glass lens can.

On forward bias it emits a spectral band of radiation, which peaks at 1550nm.

### ◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P <sub>D</sub>	120	mW	T <sub>a</sub> =25°C
Forward Current	I <sub>F</sub>	100	mA	T <sub>a</sub> =25°C
Pulse Forward Current	I <sub>FP</sub>	1000	mA	T <sub>a</sub> =25°C
Reverse Voltage	V <sub>R</sub>	5	V	T <sub>a</sub> =25°C
Operating Temperature	T <sub>OPR</sub>	-20 ~ +90	°C	
Storage Temperature	T <sub>STG</sub>	-30 ~ +100	°C	
Soldering Temperature	T <sub>SOL</sub>	260	°C	

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

‡Soldering condition: Soldering condition must be completed within 3 seconds at 260°C

### ◆ Electro-Optical Characteristics [T<sub>a</sub>=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =50mA		1.10	1.40	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V			10	uA
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =50mA	1500	1550	1600	nm
Half Width	Δλ	I <sub>F</sub> =50mA		100		nm
Rise Time	t <sub>r</sub>	I <sub>F</sub> =50mA		10		ns
Fall Time	t <sub>f</sub>	I <sub>F</sub> =50mA		10		ns

### ◆ Radiated Power [T<sub>a</sub>=25°C]

Type No.	Radiated Power at I <sub>F</sub> =50mA unit:mW			Viewing Half Angle [θ <sub>1/2</sub> ]
	Minimum	Typical	Maximum	
L1550-35K00		1.6		±50°
L1550-35K42		2.0		±6°
L1550-35M00		2.0		±50°
L1550-35M32		2.0		±15°
L1550-35T52		1.2		±55°

‡Radiated Power is measured by Ando Optical Multi Meter AQ2140 & AQ2742

### ◆ Outer dimension (Unit: mm)

