

L1450-35 High Power InGaAsP NIR LED

L1450-35 __ 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 1450nm.

◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	120	mW	T _a =25°C
Forward Current	I _F	100	mA	T _a =25°C
Pulse Forward Current	I _{FP}	1000	mA	T _a =25°C
Reverse Voltage	V _R	5	V	T _a =25°C
Operating Temperature	T _{OPR}	-20 ~ +90	°C	
Storage Temperature	T _{STG}	-30 ~ +100	°C	
Soldering Temperature	T _{SOL}	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_a=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =50mA		1.10	1.40	V
Reverse Current	I _R	V _R =5V			10	uA
Peak Wavelength	λ _P	I _F =50mA	1400	1450	1500	nm
Half Width	Δλ	I _F =50mA		100		nm
Rise Time	t _r	I _F =50mA		10		ns
Fall Time	t _f	I _F =50mA		10		ns

◆ Radiated Power [T_a=25°C]

Type No.	Radiated Power at I _F =50mA unit:mW			Viewing Half Angle [θ 1/2]
	Minimum	Typical	Maximum	
L1450-35K00		2.0		±50°
L1450-35K42		2.4		±6°
L1450-35M00		3.0		±50°
L1450-35M32		3.0		±15°
L1450-35T52		1.5		±55°

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

◆ Outer dimension (Unit: mm)

