

LED1300-35xx High Power InGaAsP NIR LED

LED1300-35xx 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 1300 nm.

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 = 1 μs.

‡ 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	1250	1300	1350	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: Q _{1/2}
	Minimum	Typical	Maximum	
L1300-35K00		1.8		±50°
L1300-35K42		2.0		±6°
L1300-35M00		3.0		±50°
L1300-35M32		3.0		±15°
L1300-35T52		1.6		±55°

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

Outer dimension (Unit: mm)

