

METAL STEM TYPE LED L1550 series

LED1550-35__ __ High Power InGaAsP IR LED

The series of LED1550-35__ __ is a InGaAsP LED mounted on a metal stem and covered with epoxy resin or hermetically sealed with Ø5 glass-lens can. On forward bias, it emits a high power radiation which peaks at 1550nm

- 1) Specifications
(1) Chip material InGaAsP/InP
(2) Peak wavelength 1550nm typ.

2) Package Lens and Outer Dimension

Type No.	Stem Type	Polarity of Stem	Lens Structure	Outer Dimension
L1550-35K00	TO-46	Cathode	epoxy resin	6
L1550-35K32	TO-46	Cathode	spherical glass	7
L1550-35K42	TO-46	Cathode	unspherical glass	8
L1550-35M00	TO-18	Cathode	epoxy resin	9
L1550-35M32	TO-18	Cathode	spherical glass	7
L1550-35T00	TO-18	Cathode	epoxy resin	9
L1550-35T32	TO-18	Cathode	spherical glass	7
L1550-35T52	TO-18	Cathode	flat glass Ø3	10

3)Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	120	mW	Ta=25 °C
Forward Current	IF	100	mA	Ta=25 °C
Pulse Forward Current	IFP	1	A	Ta=25 °C
Reverse Voltage	VR	5	V	Ta=25 °C
Operating Temperature	TOPR	-20~+90	°C	
Storage Temperature	TSTG	-30~+100	°C	
Soldering Temperature	TSOL	260	°C	

Pulse Forward Current Current condition : Duty=1% Tw=1us

3) Electro-Optical Characteristics (Ta=25 °C)

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		0.8	1.3	V
Reverse Current	IR	VR=5V			10	uA
Peak Wavelength	λp	IF=50mA	1500	1550	1600	nm
Half Width	Δλ	IF=50mA		100		nm
Rise Time	Tr	IF=50mA		10		ns
Fall time	Tf	IF=50mA		10		ns

4) Total Radiant Power and Radiant Intensity at If =50mA(Ta=25 °C)

Type	Total Radiant Power Unit : mW			Viewing Half Angle
	Minimum	Typical	Maximum	Dimension
L1550-35K00	0.12	0.25		±50°
L1550-35K32	0.08	0.15		±15°
L1550-35K42	0.08	0.15		±6°
L1550-35M00	0.12	0.25		±50°
L1550-35M32	0.08	0.15		±15°
L1550-35T00	0.12	0.25		±60°
L1550-35T32	0.08	0.15		±15°
L1550-35T52	0.05	0.10		±55°