

LED1200-35M32

Stem type LED with high output power

LED1200-35M32 is an InGaAsP LED mounted on a TO-18 stem with a spherical glass lens being designed for high output power uses. On forward bias, it emits a spectral band of radiation, which peaks at 1200nm.

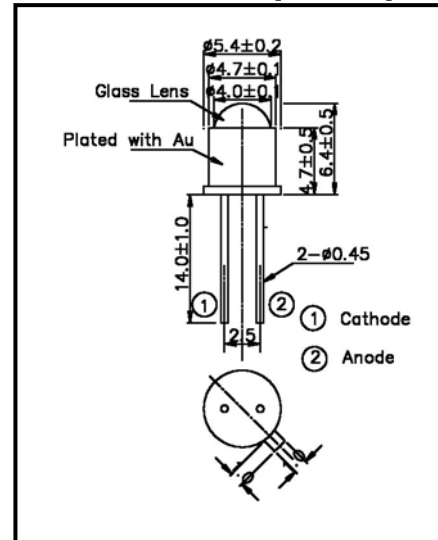
◆ Features

- 1) High radiated intensity
- 2) High Reliability

◆ Specifications

- 1) Product Name NIR LED Lamp
- 2) Type No. LED1200-35M32
- 3) Chip Spec.
 - (1) Material InGaAs/InP
 - (2) Peak Wavelength 1200 nm
- 4) Package
 - (1) Type TO-18 stem
 - (2) Lens Spherical glass lens
 - (3) Cap Gold plated

◆ Outer dimension [Unit:mm]



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P_D	120	mW	$T_a = 25^\circ\text{C}$
Forward Current	I_F	100	mA	$T_a = 25^\circ\text{C}$
Pulse Forward Current	I_{FP}	1000	mA	$T_a = 25^\circ\text{C}$
Reverse Voltage	V_R	3	V	$T_a = 25^\circ\text{C}$
Operating Temperature	T_{OPR}	-20 ~ +90	$^\circ\text{C}$	
Storage Temperature	T_{STG}	-30 ~ +100	$^\circ\text{C}$	
Soldering Temperature	T_{SOL}	260	$^\circ\text{C}$	

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

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

◆ Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V_F	$I_F = 20\text{ mA}$		0.8	1.3	V
Reverse Current	I_R	$V_R = 3\text{ V}$			10	μA
Total Radiated Power	P_o	$I_F = 20\text{ mA}$	0.8	1.8		mW
Peak Wavelength	λ_P	$I_F = 20\text{ mA}$	1150	1200	1250	nm
Half Width	$\Delta\lambda$	$I_F = 20\text{ mA}$		100		nm
Viewing Half Angle	$\theta_{1/2}$	$I_F = 20\text{ mA}$		± 15		deg.
Rise Time	t_r	$I_F = 20\text{ mA}$		10		ns
Fall Time	t_f	$I_F = 20\text{ mA}$		10		ns

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