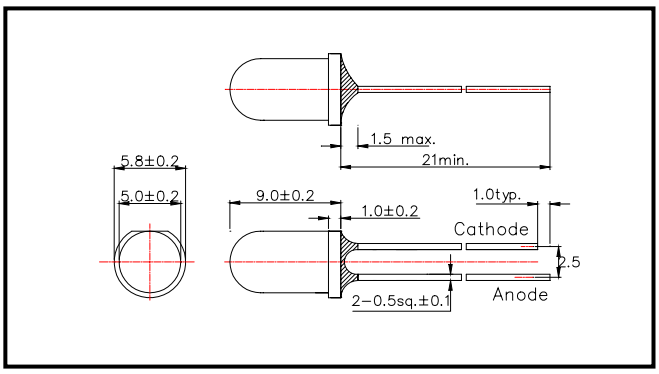
LED740-01AU Infrared LED Lamp

LED740-01AU is an AlGaAs LED mounted on a lead frame with a clear epoxy lens. On forward bias it emits a spectral band of radiation, which peaks at 740nm.

Specifications

1) Product Name	Infrared LED Lamp
2) Type No.	LED740-01AU
3) Chip	
(1) Chip Material	AlGaAs
(2) Peak Wavelength	740 nm typ.
4) Package	
(1) Type	□5mm clear molding
(2) Resin Material	Epoxy Resin
(3) Lead Frame	Soldered

Outer dimension (Unit: mm)



Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P_D	200	mW	Ta = 25°C
Forward Current	I_F	100	mA	Ta = 25°C
Pulse Forward Current	I_{FP}	500	mA	Ta = 25°C
Reverse Voltage	V_R	5	V	Ta = 25°C
Operating Temperature	T_{OPR}	-30 ~ +85	°C	
Storage Temperature	T_{STG}	-30 ~ +100	°C	
Soldering Temperature	T_{SOL}	260	°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 = 50 mA		1.85	2.00	V
Reverse Current	I_R	V_R = 5 V			10	uA
Total Radiated Power	P_O	I_F = 50 mA	13.0	18.0		mW
Radiant Intensity	I_E	I_F = 50 mA	40	90		mW/sr
Peak Wavelength	λ_P	I_F = 50 mA	735	740	745	nm
Half Width		I_F = 50 mA		30		nm
Viewing Half Angle		I_F = 50 mA		±10		deg.
Rise Time	tr	I_F = 50 mA		80		ns
Fall Time	tf	I_F = 50 mA		80		ns

‡Total Radiated Power is measured by Photodyne #500
‡Radiant Intensity is measured by Tektronix J-6512