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LED840-04AU

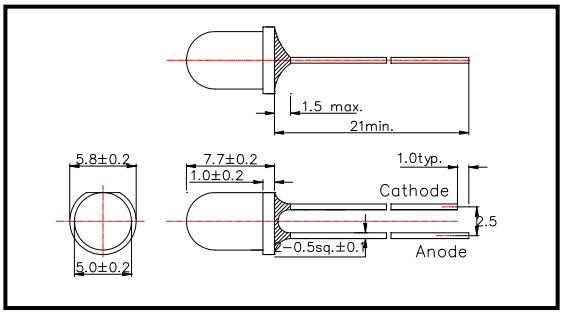
Infrared LED Lamp

LED840-04AU 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 840 nm.

Specifications

1) Product Name	Infrared LED Lamp
2) Type No.	LED840-04AU
3) Chip	
(1) Chip Material	AlGaAs
(2) Peak Wavelength	840 nm typ.
4) Package	
(1) Type	5 mm 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	175	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 [Ta=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V_F	I_F = 50 mA		1.60	1.90	V
Reverse Current	I_R	V_R = 5 V			10	uA
Total Radiated Power	P_O	I_F = 50 mA	17.0	20.0		mW
Radiant Intensity	I_E	I_F = 50 mA	30	50		mW/sr
Peak Wavelength	λ_P	I_F = 50 mA	825	840	855	nm
Half Width	$\Delta\lambda$	I_F = 50 mA		35		nm
Viewing Half Angle	α	I_F = 50 mA		±20		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.