L735-_ _AU Infrared LED Lamp

This series of L735-_ _AU is a GaAlAs LED mounted on a lead frame and encapsulated in various types of epoxy lens which offer different design settings.
On forward bias, it emits a high power radiation of typical 18W with a peak wavelngth at 735nm.

1) Specifications

(1) Chip material	AlGaAs
(2) Peak wavelength	735nm
(3) Package	Clear epoxy resin
(4) Lead frame	Soldered

2) Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P_D	200	mW	Ta=25°C
Forward Current	I_F	75	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	Ta=25°C
Storage Temperature	T_{STG}	-30 ~ +100	°C	
Soldering Temperature	T_{SOL}	260	°C	

3) Electro-Optical Characteristics [Ta=25°C]

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V_F	I_F=50mA		1.85	2.0	V
Reverse Current	I_R	V_R=5V			10	uA
Total Radiated Power	P_O	I_F=50mA	13.0	18.0		mW
Peak Wavelength	**l** P	I_F=50mA		735		nm
Half Width	**D l**	I_F=50mA		30		nm
Rise Time	tr	I_F=50mA		80		ns
Fall Time	tf	I_F=50mA		80		ns

4) Characteristics of Brightness [Ta=25°C]

Type	Viewing Half Angle	Radiant Intensity I_F=50mA unit: mW/sr			Outer Dimension	
		Minimum	Typical	Maximum	Dimension	Figure
L735-01AU	±10°		90		**f** 5	1
L735-02AU	±5°		100		**f** 5	2
L735-03AU	±15°		70		**f** 5	3
L735-04AU	±20°		35		**f** 5	4
L735-05AU	±40°		10		**f** 5	5
L735-06AU	±6°		110		**f** 5	6
L735-09AU	±25°(Long)		60		**f** 5	7
	±15°(Short)				Oval	
L735-33AU	±15°		40		**f** 3	9
L735-36AU	±30°		20		**f** 3	10

‡ Radiant Intensity is measured by Tektronix J-16.
‡ Total Radiated Power is measured by Photodyne #500.

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