Lead (Pb) Free Product – RoHS Compliant

L645-_ _V High Bright Red LED Lamp

This series of L645-_ _V is an InGaAlP LED mounted on a lead frame with a clear epoxy lens. On forward bias, it emits a band of visible light that peaks 645nm.

1) Specifications

(1) Chip material	InGaAlP
(2) Peak wavelength	645nm typ.
(3) Package	Clear epoxy resin
(4) Lead frame	Soldered

2) Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	120	mW	Ta=25°C
Forward Current	IF	50	mA	Ta=25°C
Reverse Voltage	VR	5	V	Ta=25°C
Operating Temperature	TOPR	-30 ~ +85	°C	Ta=25°C
Storage Temperature	TSTG	-30 ~ +100	°C	
Soldering Temperature	TSOL	260	°C	

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

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=20mA		2.0	2.3	V
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power	PO	IF=20mA		2.5		mW
Peak Wavelength	**I** P	IF=20mA	635	645	655	nm
Half Width	**D I**	IF=20mA		20		nm

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

Type	Viewing Half Angle	Brightness IF=20mA unit: mcd			Outer Dimension	
		Minimum	Typical	Maximum	Dimension	Figure
L645-01V	±9°		2000		ϕ5	1
L645-02V	±3°		3000		ϕ5	2
L645-03V	±12°		1500		ϕ5	3
L645-04V	±15°		600		ϕ5	4
L645-05V	±30°		100		ϕ5	5
L645-06V	±3°		5000		ϕ5	6
L645-09V	±25°(Long) ±15°(Short)		600		ϕ5 Oval	7
L645-31V					ϕ3	8
L645-33V	±16°		500		ϕ3	9
L645-34V					ϕ3	10
L645-36V	±40°		250		ϕ3	11
L645-41V					ϕ4	12
L645-42V					ϕ4	12

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

EPITEX INC.: 66-3, Minamikawabe-cho, Higashi-Kujyo, Minami-Ku, Kyoto, Japan
Tel: ++81-75-682-2338 Fax: ++81-75-682-2267
e-mail: sales-dep@epitex.com http://www.epitex.com