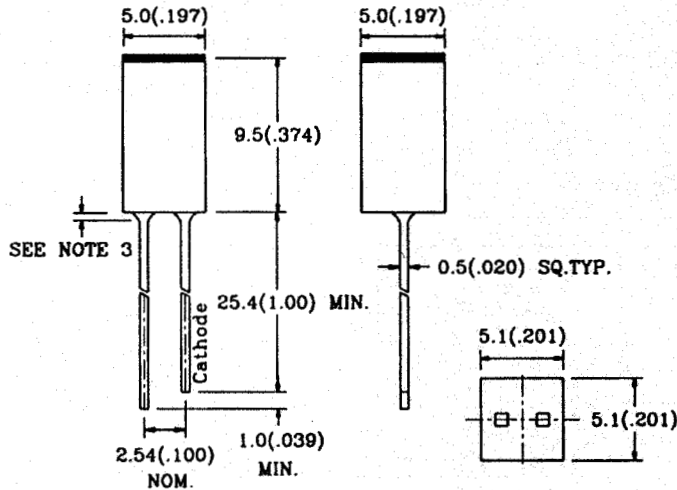


L-643XX series ... 5.0x5.0mm SQUARE LED LAMP

MAIN FEATURES :

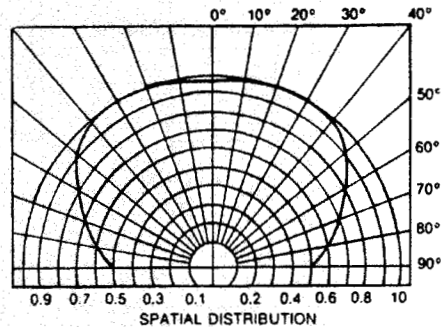
- ⊙ 5.0x5.0mm SQUARE LED LAMP
- ⊙ STANDARD 1" LEAD
- ⊙ I.C. COMPATIBLE
- ⊙ LONG LIFE-SOLID STATE RELIABILITY
- ⊙ LOW POWER CONSUMPTION

◆ PACKAGE DIMENSIONS



Notes:

1. All Dimension are in millimeter.
2. Tolerance is $\pm 0.25\text{mm}(0.010")$ unless otherwise specified.
3. Protruded resin under flange is 1.5mm(0.059") max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specification are subject to change without notice.



◆ SELECTION GUIDE AND APPLICATION INFORMATION (RATINGS AT 25°C AMBIENT)

Part No.	Chip			Wave Length λ p(nm)	Absolute Maximum Ratings				Electro-Optical Characteristics						View Angle Angle (deg)
	Raw Material	Emitted Color	Lens Color		$\Delta\lambda$ nm	Pd mW	If mA	If (Peak)	Vf(V)			If Iv (mcd)			
									Min.	Typ.	Max.	(Rec)	Min.	Typ.	
L-653HD	GaP	Bright Red	Red Diffused	700	90	45	15	50	1.7	2.1	2.8	5~10	0.8	1.5	150
L-653ED	GaAsP/GaP	Hi. effi Red	Red Diffused	635	45	100	30	160	1.7	2.0	2.8	10~20	3.0	12.0	150
L-653ED-E	GaAsP/GaP	Orange	Orange Dffused	635	45	100	30	160	1.7	2.0	2.8	10~20	3.0	12.0	150
L-653GD	GaP	Green	Green Diffused	565	30	100	30	160	1.7	2.1	2.8	10~20	2.0	10.0	150
L-653YD	GaAsP/GaP	Yellow	Yellow Diffused	585	30	100	30	160	1.7	2.1	2.8	10~20	2.0	10.0	150
L-653AD	GaAsP/GaP	Amber	Amber Diffused	585	30	100	30	160	1.7	2.1	2.8	10~20	2.0	10.0	150
L-653I D	GaAlAs	Hi. effi Red	Red Diffused	625	20	60	20	160	1.6	1.8	2.1	10~20	12.0	30.0	150
L-653SRD	GaAlAs	Super Red	Red Diffused	660	20	60	20	160	1.6	1.8	2.1	10~20	30.0	80.0	150
L-653LRD	GaAlAs	Super Red	Red Diffused	660	20	60	20	160	1.6	1.8	2.1	10~20	80.0	120	150
L-653URD	GaAlAs	Super Red	Red Diffused	660	20	60	20	160	1.6	1.8	2.1	10~20	120	200	150
L-653HDT	GaP	Bright Red	Red Trans.+Diff.	700	90	45	15	50	1.7	2.1	2.8	5~10	0.8	1.5	150
L-653EDT	GaAsP/GaP	Hi. effi Red	Red Trans.+Diff.	635	45	100	30	160	1.7	2.0	2.8	10~20	3.0	12.0	150
L-653EDT-E	GaAsP/GaP	Orange	Orange Trans.+Diff.	635	45	100	30	160	1.7	2.0	2.8	10~20	3.0	12.0	150
L-653GDT	GaP	Green	Green Trans.+Diff.	565	30	100	30	160	1.7	2.1	2.8	10~20	2.0	10.0	150
L-653YDT	GaAsP/GaP	Yellow	Yellow Trans.+Diff.	585	30	100	30	160	1.7	2.1	2.8	10~20	2.0	10.0	150
L-653ADT	GaAsP/GaP	Amber	Amber Trans.+Diff.	585	30	100	30	160	1.7	2.1	2.8	10~20	2.0	10.0	150
L-653I DT	GaAlAs	Hi. effi Red	Red Trans.+Diff.	625	20	60	20	160	1.6	1.8	2.1	10~20	12.0	30.0	150
L-653SRDT	GaAlAs	Super Red	Red Trans.+Diff.	660	20	60	20	160	1.6	1.8	2.1	10~20	30.0	80.0	150
L-653LRDT	GaAlAs	Super Red	Red Trans.+Diff.	660	20	60	20	160	1.6	1.8	2.1	10~20	80.0	120	150
L-653URDT	GaAlAs	Super Red	Red Trans.+Diff.	660	20	60	20	160	1.6	1.8	2.1	10~20	120	200	150

Remark : Trans.+Diff. :Body Transparent & Top Diffused

◆ ABSOLUTE MAXIMUM RATING: (Ta=25°C)

Reverse Voltage	: 5 Volt
Reverse Current(Vr = 5V)	: 10 μ A
Operating Temperature Range	: -40°C to +85°C
Storage Temperature Range	: -40°C to +100°C
Lead Soldering Temperature	: 260°C for 5 Seconds
(1.6mm(1/16inch) from body)	

◆ ELECTRO-OPTICAL CHARACTERISTICS: (Ta=25°C)

Para meter Description	Symbol	Unit
Spectral Line half-Width	$\Delta \lambda$	nm
Power Dissipation	Pd	mW
Peak Forward Current (Duty 1/10,@KHz)	If(Peak)	mA
Recommended Operation Current	If(Rec)	mA
Average Luminous intensity (If = 10mA)	Iv	mcd