

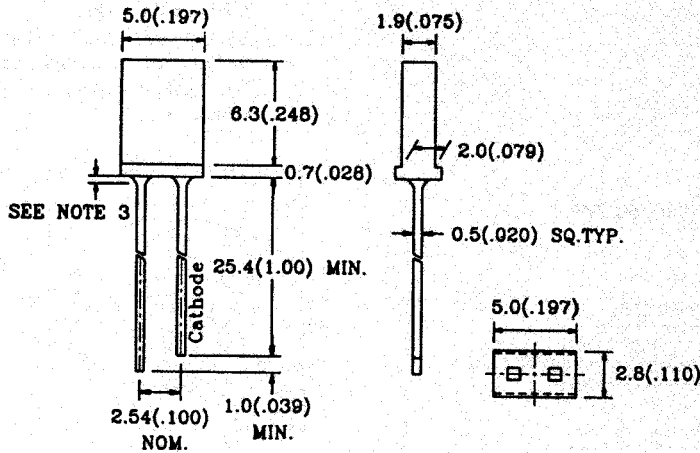
L-413XD series ...

2.0x5.0x7.0mm Rectangular LED LAMP

MAIN FEATURES :

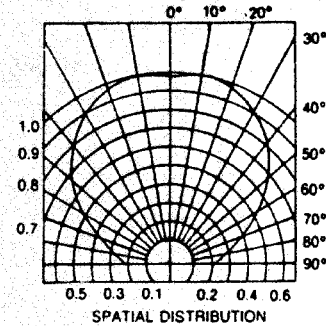
- ⊙ 2.0x5.0x 7.0mm Rectangular LED LAMP
- ⊙ STANDARD 1" LEAD
- ⊙ I.C. COMPATIBLE
- ⊙ LONG LIFE-SOLID STATE RELIABILITY
- ⊙ LOW POWER CONSUMPTION

◆ PACKAGE DIMENSIONS



Notes:

1. All Dimension are in millimeter.
2. Tolerance is $\pm 0.25\text{mm}(0.010\text{'})$ unless otherwise specified.
3. Protruded resin under flange is 1.5mm(0.59") 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		Lens Color	Wave Length λ p(nm)	Absolute Maximum Ratings				Electro-Optical Characteristics			View Angle (deg)			
	Raw Material	Emitted Color			$\Delta\lambda$	Pd (mW)	If (mA)	If (Peak)	Vf(V) Min.	Vf(V) Typ.	Vf(V) Max.		If (Rec)	Iv (mcd) Min.	Iv (mcd) Typ.
L-413RD	GaAsP	Red	Red Diffused	655	40	110	40	200	1.5	1.7	2.0	10~20	0.5	1.5	120
L-413HD	GaP	Bright Red	Red Diffused	700	90	45	15	50	1.7	2.1	2.8	5~10	0.8	2.0	120
L-413ED	GaAsP/GaP	Hi. effi Red	Red Diffused	635	45	100	30	160	1.7	2.0	2.8	10~20	3.0	10.0	120
L-413ED-E	GaAsP/GaP	Orange	Orange Dffused	635	45	100	30	160	1.7	2.0	2.8	10~20	3.0	10.0	120
L-413GD	GaP	Green	Green Diffused	565	30	100	30	160	1.7	2.1	2.8	10~20	2.0	8.0	120
L-413YD	GaAsP/GaP	Yellow	Yellow Diffused	585	30	100	30	160	1.7	2.1	2.8	10~20	2.0	8.0	120
L-413AD	GaAsP/GaP	Amber	Amber Diffused	585	30	100	30	160	1.7	2.1	2.8	10~20	2.0	8.0	120
L-413I D	GaAlAs	Hi. effi Red	Red Diffused	625	20	60	20	160	1.6	1.8	2.1	10~20	10.0	30.0	120
L-413SRD	GaAlAs	Super Red	Red Diffused	660	20	60	20	160	1.6	1.8	2.1	10~20	30.0	80.0	120
L-413LRD	GaAlAs	Super Red	Red Diffused	660	20	60	20	160	1.6	1.8	2.1	10~20	80.0	120	120
L-413URD	GaAlAs	Super Red	Red Diffused	660	20	60	20	160	1.6	1.8	2.1	10~20	120	200	120

◆ 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