



LIGITEK

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HIGH VOLTAGE LED LAMPS



Lead-Free Parts

LUY3133H/HV12-PF

DATA SHEET

DOC. NO : QW0905-LUY3133H/HV12-PF

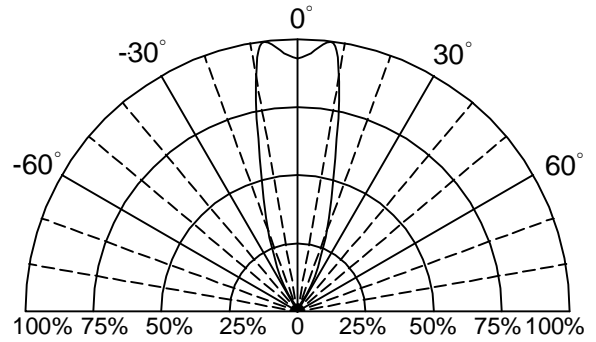
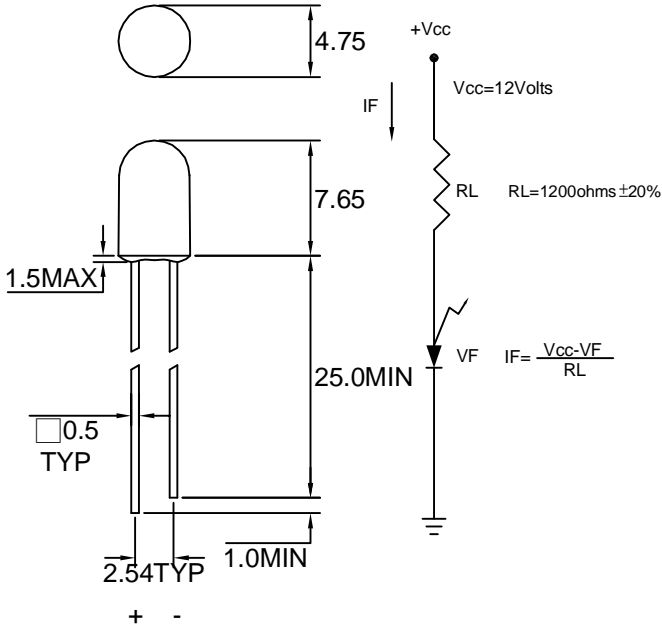
REV. : A

DATE : 22 - May. - 2006



Package Dimension

Directivity Radiation



Note:1.All dimension are in millimeter tolerance is $\pm 0.25\text{mm}$ unless otherwise noted
2.Specifications are subject to change without notice

• Part Selection And Application Information (Ratings At 25°C Ambient)

PART NO	MATERIAL	COLOR		Dominant wave length λ_{Dnm}	Spectral halfwidth $\Delta \lambda$ nm	Forward current (mA) @12V		Luminous Intensity (mcd) @12V		Reverse current (μA) VR=15V	Viewing angle $2\theta_{1/2}$ (deg)
		Emitted	Lens			Min.	Max.	Min.	Typ.		
LUY3133H/HV12-PF	AlGaInP/GaP	Yellow	Water Clear	590	20	6.0	12	900	1500	100	30

• Absolute Maximum Rating (Ta=25°C)

PARAMETER	RED		GREEN		YELLOW		ORANGE		UNIT	REMARK
					UYH					
Forward voltage					12				V	
Reverse voltage					15				V	
Operating Temperature	-40°C TO +85°C									
Storage Temperature	-40°C TO +100°C									



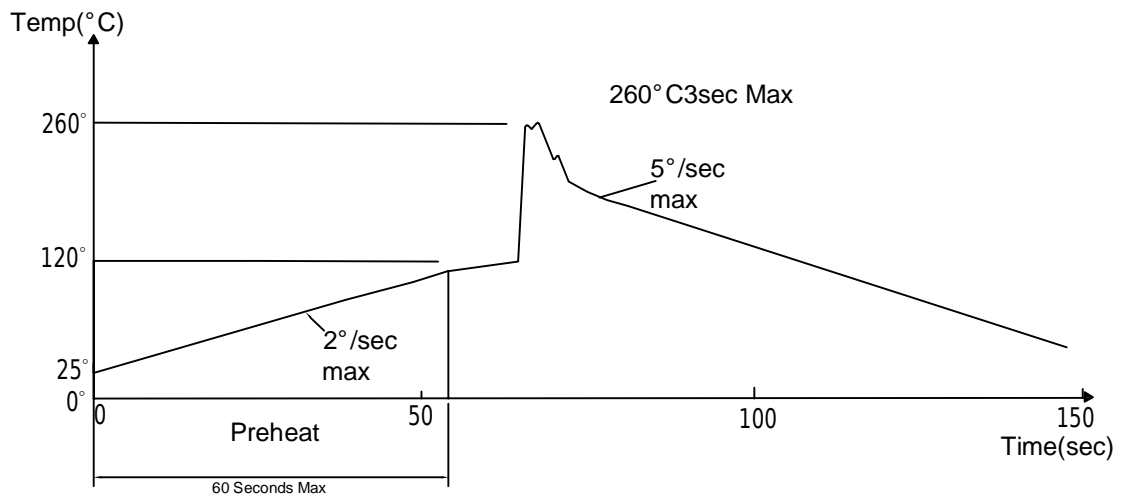
Soldering Condition(Pb-Free)

1.Iron:

- Soldering Iron:30W Max
- Temperature 350°C Max
- Soldering Time:3 Seconds Max(One Time)
- Distance:2mm Min(From solder joint to body)

2.Wave Soldering Profile

- Dip Soldering
- Preheat: 120°C Max
- Preheat time: 60seconds Max
- Ramp-up
- 2° C/sec(max)
- Ramp-Down:-5° C/sec(max)
- Solder Bath:260°C Max
- Dipping Time:3 seconds Max
- Distance:2mm Min(From solder joint to body)





Reliability Test:

Test Item	Test Condition	Description	Reference Standard
Operating Life Test	1.Under Room Temperature 2.If=20mA 3.t=1000 hrs (-24hrs, +72hrs)	This test is conducted for the purpose of determining the resistance of a part in electrical and thermal stressed.	MIL-STD-750: 1026 MIL-STD-883: 1005 JIS C 7021: B-1
High Temperature Storage Test	1.Ta=105 °C ±5°C 2.t=1000 hrs (-24hrs, +72hrs)	The purpose of this is the resistance of the device which is laid under condition of high temperature for hours.	MIL-STD-883:1008 JIS C 7021: B-10
Low Temperature Storage Test	1.Ta=-40 °C ±5°C 2.t=1000 hrs (-24hrs, +72hrs)	The purpose of this is the resistance of the device which is laid under condition of low temperature for hours.	JIS C 7021: B-12
High Temperature High Humidity Test	1.Ta=65 °C ±5°C 2.RH=90%~95% 3.t=240hrs ±2hrs	The purpose of this test is the resistance of the device under tropical for hours.	MIL-STD-202:103B JIS C 7021: B-11
Thermal Shock Test	1.Ta=105 °C ±5°C & -40 °C ±5°C (10min) (10min) 2.total 10 cycles	The purpose of this is the resistance of the device to sudden extreme changes in high and low temperature.	MIL-STD-202: 107D MIL-STD-750: 1051 MIL-STD-883: 1011
Solder Resistance Test	1.T.Sol=260 °C ±5°C 2.Dwell time= 10 ±1sec.	This test intended to determine the thermal characteristic resistance of the device to sudden exposures at extreme changes in temperature when soldering the lead wire.	MIL-STD-202: 210A MIL-STD-750: 2031 JIS C 7021: A-1
Solderability Test	1.T.Sol=230 °C ±5°C 2.Dwell time=5 ±1sec	This test intended to see soldering well performed or not.	MIL-STD-202: 208D MIL-STD-750: 2026 MIL-STD-883: 2003 JIS C 7021: A-2