LITEON

T-1¾(5mm) Bi-Polar Indicator Lamp

LTL- 298YJ Yellow

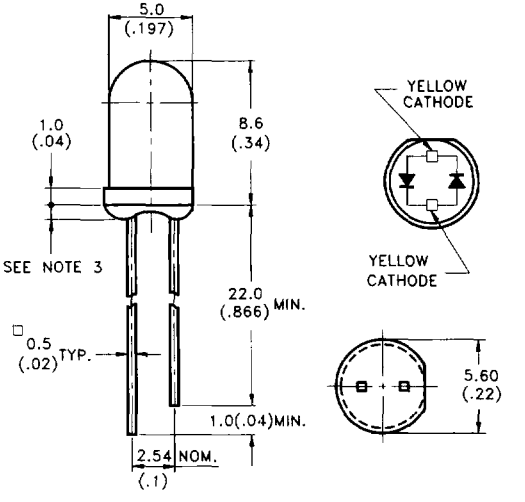
Features

- Dual Yellow chips are matched for uniform light output.
- T-1¾ type package.
- Long life solid state reliability.
- Low power consumption.
- I.C. compatible.

Description

The LTL-298YJ bipolar lamp is a white diffused, wide viewing angle, dual chips, utilizing Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.
The dual chips operating dependently of each other.

Package Dimensions



Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25mm (.010") unless otherwise noted.
3. Protruded resin under flange is 1.0mm (.04") max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.

Devices

Part No. LTL-	Lens		Source Color
	Color	Diffusion	
298YJ	White	Diffused	Yellow

Absolute Maximum Ratings at Ta=25 ℃

Parameter	Yellow	Unit
Power Dissipation	60	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Continuous Forward Current	20	mA
Derating Linear From 50 ℃	0.25	mA/ ℃
Reverse Voltage	5	V
Operating Temperature Range	-55 ℃ to +100 ℃	
Storage Temperature Range	-55 ℃ to +100 ℃	
Lead Soldering Temperature [1.6mm (0.063in) From Body]	260 ℃ for 5 Seconds	

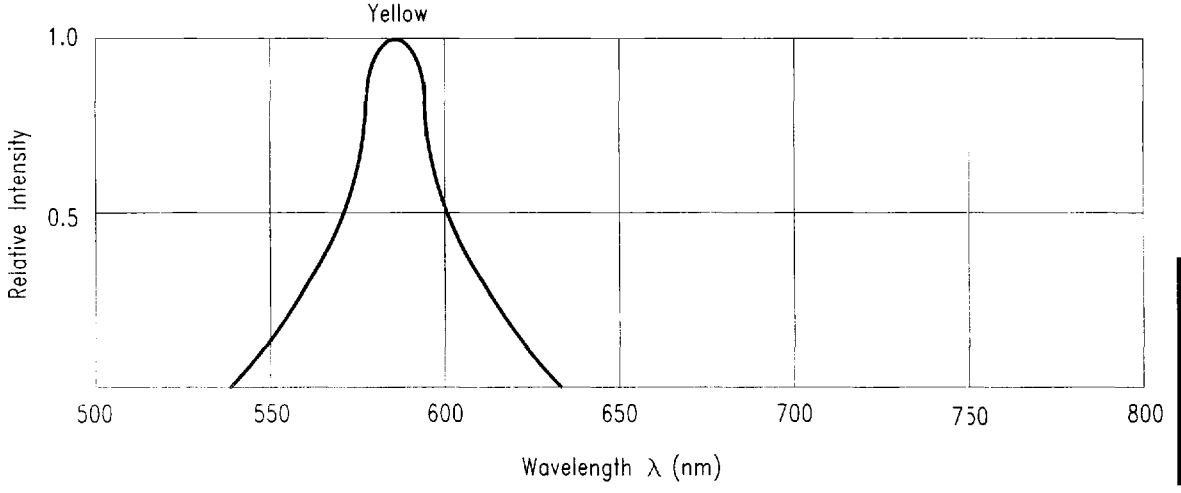


Fig.1 RELATIVE INTENSITY VS. WAVELENGTH

Electrical / Optical Characteristics and Curves at Ta = 25 ℃

Parameter	Symbol	Part No. LTL-	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	Iv	298YJ	2.5	8.7		mcd	IF=20 mA Note 1
Viewing Angle	2 θ ½	298YJ		50		deg	Note 2 (Fig.6)
Peak Emission Wavelength	λP			585		nm	Measurement @Peak (Fig.1)
Dominant Wavelength	λd			588		nm	Note 3
Spectral Line Half Width	Δ λ			35		nm	
Forward Voltage	VF			2.1	2.8	V	IF=20mA
Reverse Current	IR				100	μA	VR=5V
Capacitance	C			15		PF	VF=0 f=1MHZ

Notes:
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
2. $\theta 1/2$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
3. The dominant wavelength, λd is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

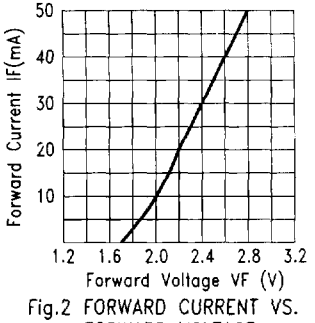


Fig.2 FORWARD CURRENT VS. FORWARD VOLTAGE

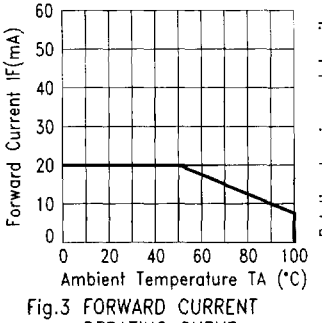


Fig.3 FORWARD CURRENT DERATING CURVE

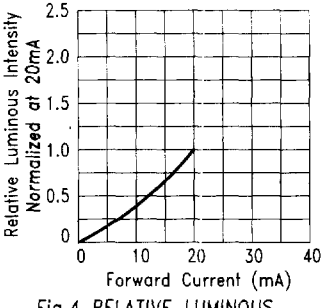


Fig.4 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

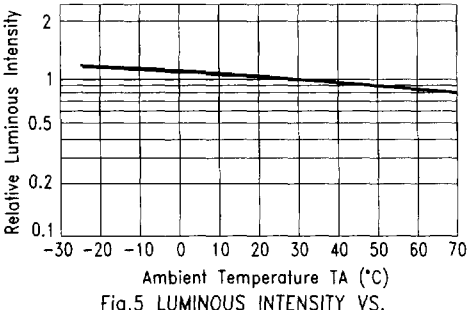


Fig.5 LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

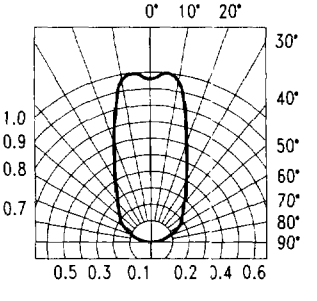


Fig.6 SPATIAL DISTRIBUTION