LITEON

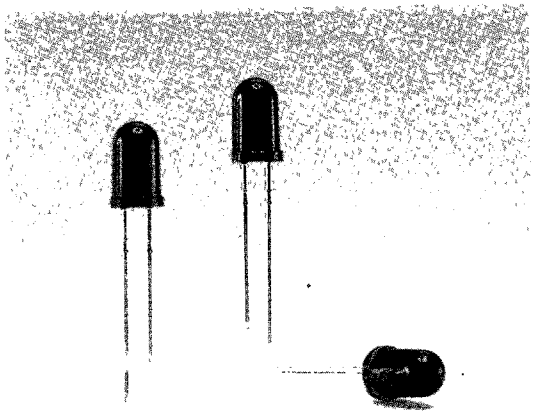
ULTRA BRIGHT RED SOLID STATE LAMPS T-1¾ STANDARD 5φ LED

LTL-4263 / 4264 / 4268

T-41-21

FEATURES

- ULTRA-BRIGHTNESS.
- NEW STURDY LEADS.
- IC COMPATIBLE/LOW CURRENT CAPABILITY.
- RELIABLE AND RUGGED.



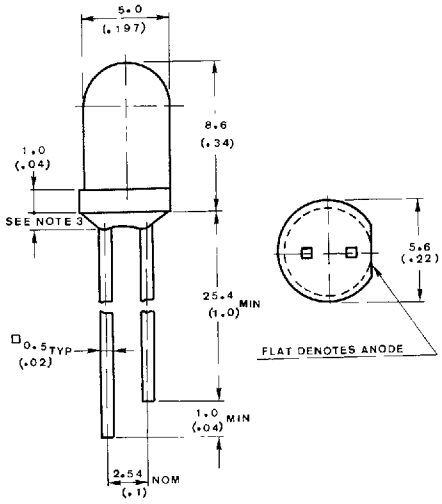
DESCRIPTION

The semiconductor material is Gallium Aluminum Arsenid Ultra-brightness red Light emitting diodes. The LTL-4263, have Red diffused lens. The LTL-4264 have red, non-diffused lenses where as the LTL-4268, has a untinted. non-diffused lenses lamp out perform conventional LED lamps. By utilizing new higher intensity material, we achieve superior product performance.

DEVICES

PART NO. PTL–	LENS		SOURCE COLOR
	COLOR	DIFFUSION	
4263	Red	Diffused	GaAlAs Red
4264H4	Red	Transparent	GaAlAs Red
4264H3			
4264L2			
4264L1			
4268H4	Water Clear	Non-diffused	GaAlAs Red
4268H3			
4268L2			
4268L1			

PACKAGE DIMENSION



NOTES:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25mm (.010") unless otherwise noted.
3. Protruded resin under flange is 1.5mm (.059") max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.

ABSOLUTE MAXIMUM RATINGS AT $T_A = 25°C$

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation	100	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	200	mA
Continuous Forward Current	40	mA
Derating Linear From 25°C	0.5	mA/°C
Reverse Voltage	4	V
Operating Temperature Range	−55°C to +100°C	
Storage Temperature Range	−55°C to +100°C	
Lead Soldering Temperature [1.6mm (0.063 in) From Body]	260°C for 5 Seconds	

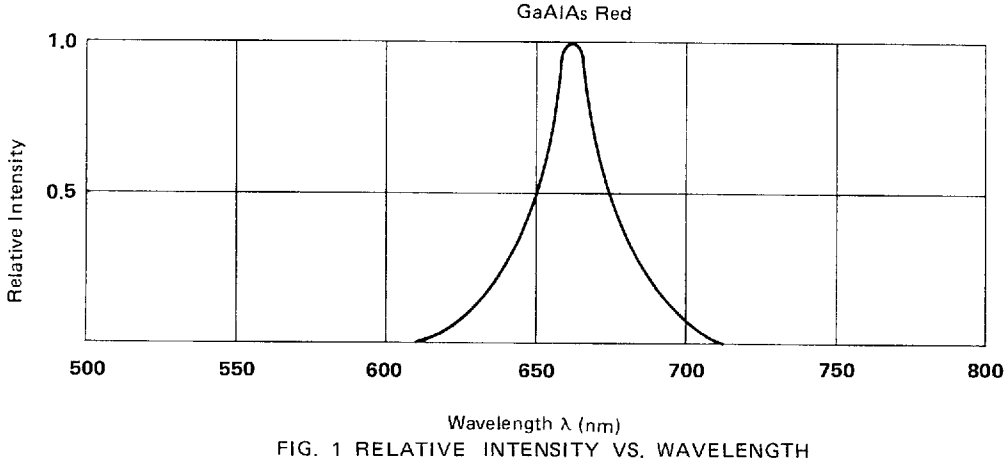


FIG. 1 RELATIVE INTENSITY VS. WAVELENGTH

ELECTRICAL/OPTICAL CHARACTERISTICS AND CURVES AT $T_A = 25°C$

PARAMETER	SYMBOL	PART NO. LTL–	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Luminous Intensity	Iv	4263 4264H4 4264H3 4264L2 4264L1 4268H4 4268H3 4268L2 4268L1	29 230 160 90 80 230 160 90 80	90 270 220 150 100 270 220 150 100		mcd	I_F = 20 mA Note 1
Viewing Angle	2θ½	4263 4264 4268		40 16 16		deg.	Note 2 (Fig. 6)
Peak Emission Wavelength	λPEAK			660		nm	Measurement @Peak (Fig. 1)
Spectral Line Half-Width	Δλ			20		nm	
Forward Voltage	V_F			1.8	2.4	V	I_F = 20 mA
Reverse Current	I_R				100	μA	V_R = 4V
Capacitance	C			30		PF	V_F = 0 f = 1 MHZ

NOTES 1 Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commission Internationale De L'Eclairage) eye-response curve
2 θ½ is the off-axis angle at which the luminous intensity is half the axial luminous intensity

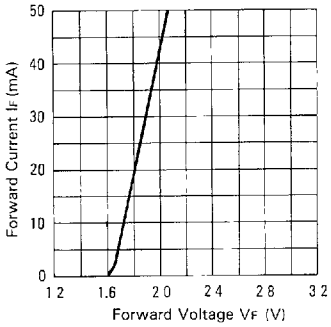


FIG 2 FORWARD CURRENT VS FORWARD VOLTAGE

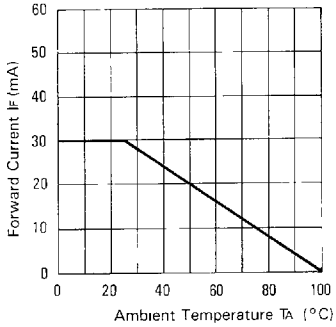


FIG 3 FORWARD CURRENT VS DERATING CURVE

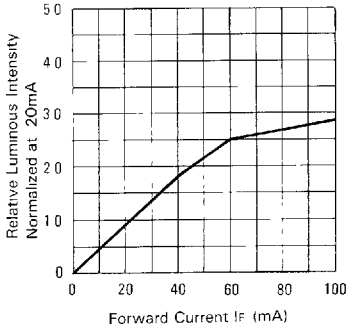


FIG 4 RELATIVE LUMINOUS INTENSITY VS FORWARD CURRENT

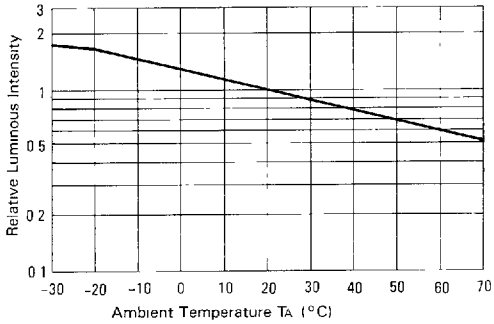


FIG 5 LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE CHARACTERISTICS

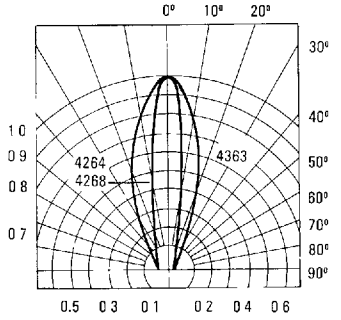


FIG 6 SPATIAL DISTRIBUTION