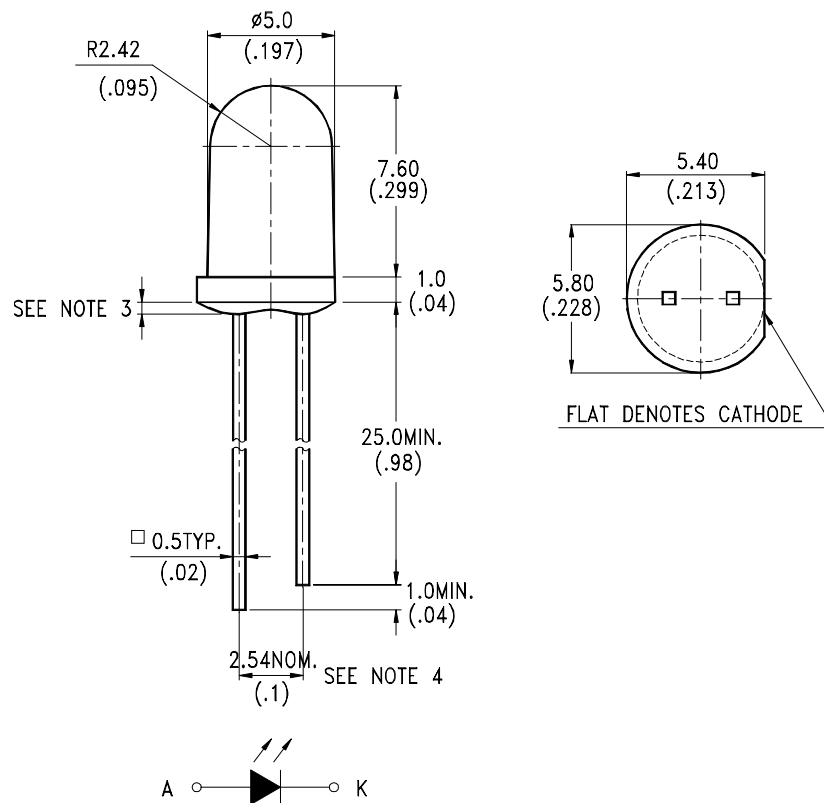


FEATURES

- * SPECIAL FOR HIGH CURRENT AND LOW FORWARD VOLTAGE
- * HIGH POWER
- * AVAILABLE FOR PULSE OPERATING
- * WIDE VIEWING ANGLE
- * AMMO PACK

PACKAGE DIMENSIONS



NOTES:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25\text{mm}$ (.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.



LITE-ON ELECTRONICS, INC.

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ABSOLUTE MAXIMUM RATINGS AT TA=25°C

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation	150	mW
Peak Forward Current (300pps, 10 μ s pulse)	2	A
Continuous Forward Current	100	mA
Reverse Voltage	5	V
Operating Temperature Range	-40°C to + 85°C	
Storage Temperature Range	-55°C to + 100°C	
Lead Soldering Temperature [1.6mm(.063") From Body]	260°C for 5 Seconds	

ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION	BIN NO.
Aperture Radiant Incidence	Ee	0.64		1.20	mW/cm ²	I _F = 20mA	BIN B
		0.80		1.68			BIN C
		1.12					BIN D
Radiant Intensity	I _E	4.81		9.02	mW/sr	I _F = 20mA	BIN B
		6.02		12.63			BIN C
		8.42					BIN D
Peak Emission Wavelength	λ_{Peak}		940		nm	I _F = 20mA	
Spectral Line Half-Width	$\Delta \lambda$		50		nm	I _F = 20mA	
Forward Voltage	V _F		1.25	1.6	V	I _F = 50mA	
Forward Voltage	V _F		1.85	2.3	V	I _F = 500mA	
Reverse Current	I _R			100	μ A	V _R = 5V	
Viewing Angle (See FIG.6)	2 $\theta_{1/2}$		50		deg.		

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

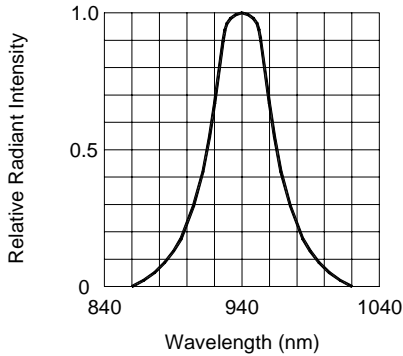


FIG.1 SPECTRAL DISTRIBUTION

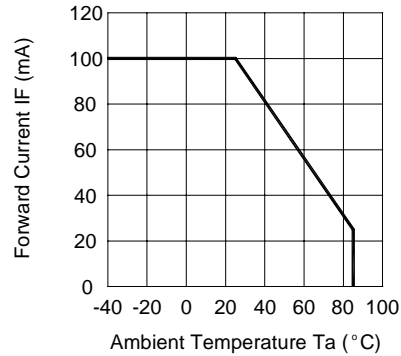


FIG.2 FORWARD CURRENT VS. AMBIENT TEMPERATURE

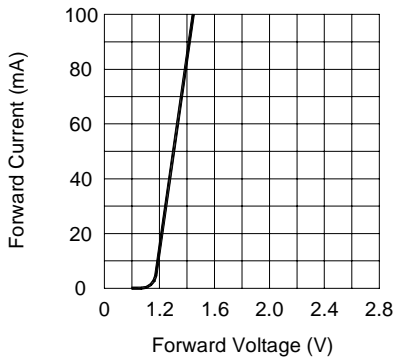


FIG.3 FORWARD CURRENT VS. FORWARD VOLTAGE

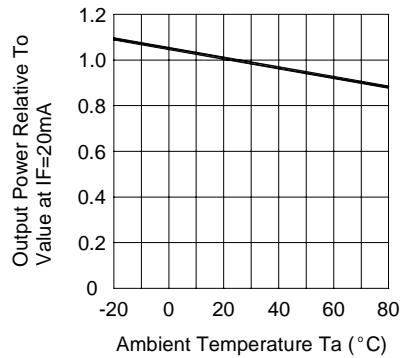


FIG.4 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

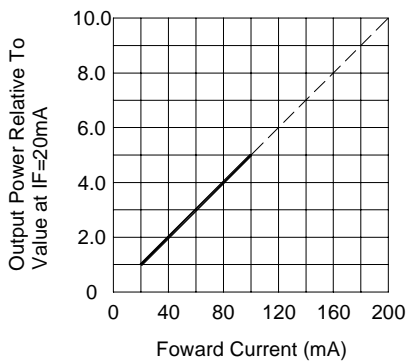


FIG.5 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

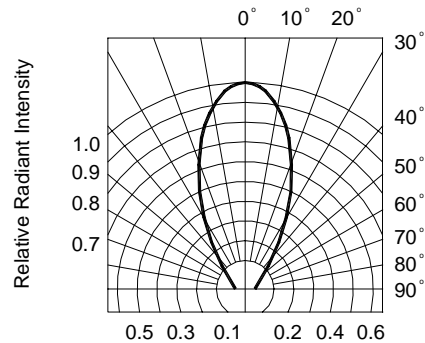
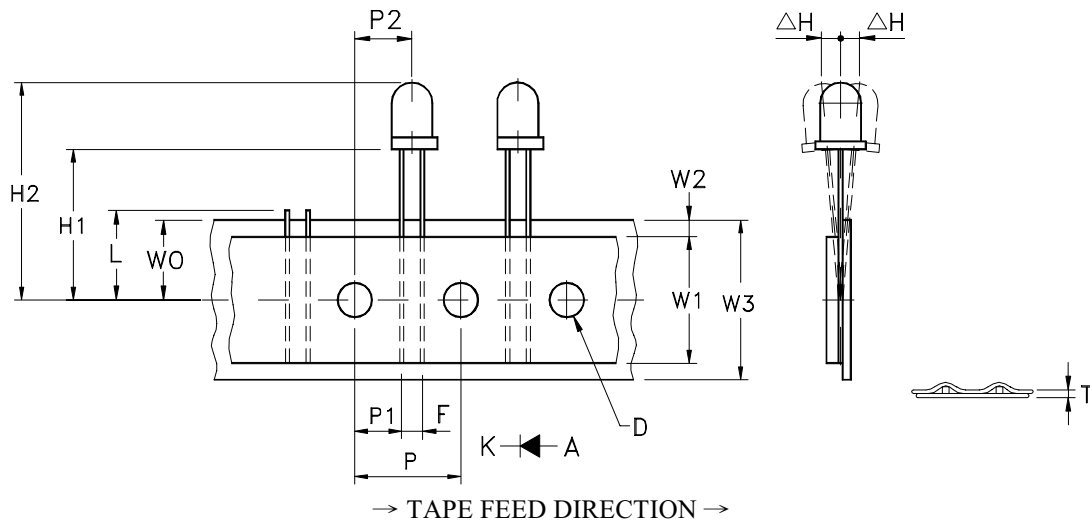


FIG.6 RADIATION DIAGRAM

PACKAGE DIMENSIONS



I T E M	SYMBOL	SPECIFICATION			
		MINIMUM		MAXIMUM	
		MM	INCH	MM	INCH
Tape Feed Hole Diameter	D	3.8	0.149	4.2	0.165
Component Lead Pitch	F	2.3	0.019	3.0	0.118
Front To Rear Deflection	ΔH	--	--	2.0	0.078
Feed Hole To Bottom Of Component	H1	21.5	0.846	22.5	0.886
Feed Hole To Overall Component Height	H2	--	--	32.00	1.259
Lead Length After Component Height	L	W0		11.0	0.433
Feed Hole Pitch	P	12.4	0.488	13.0	0.511
Lead Location	P1	4.4	0.173	5.8	0.228
Center Of Component Location	P2	5.05	0.198	7.65	0.301
Total Tape Thickness	T	--	--	0.90	0.035
Feed Hole Location	W0	8.5	0.334	9.75	0.384
Adhesive Tape Width	W1	12.5	0.492	13.5	0.531
Adhesive Tape Position	W2	0	0	3.0	0.118
Tape Width	W3	17.5	0.689	19.0	0.748