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SPC-F005.DWG

REVISIONS

DOC. NO. SPC-F005 \* Effective: 7/8/02 \* DCP No: 1398

DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
1908	A	RELEASED	EO	6/7/06	YA	6/19/06	HO	6/19/06



RoHS Compliant

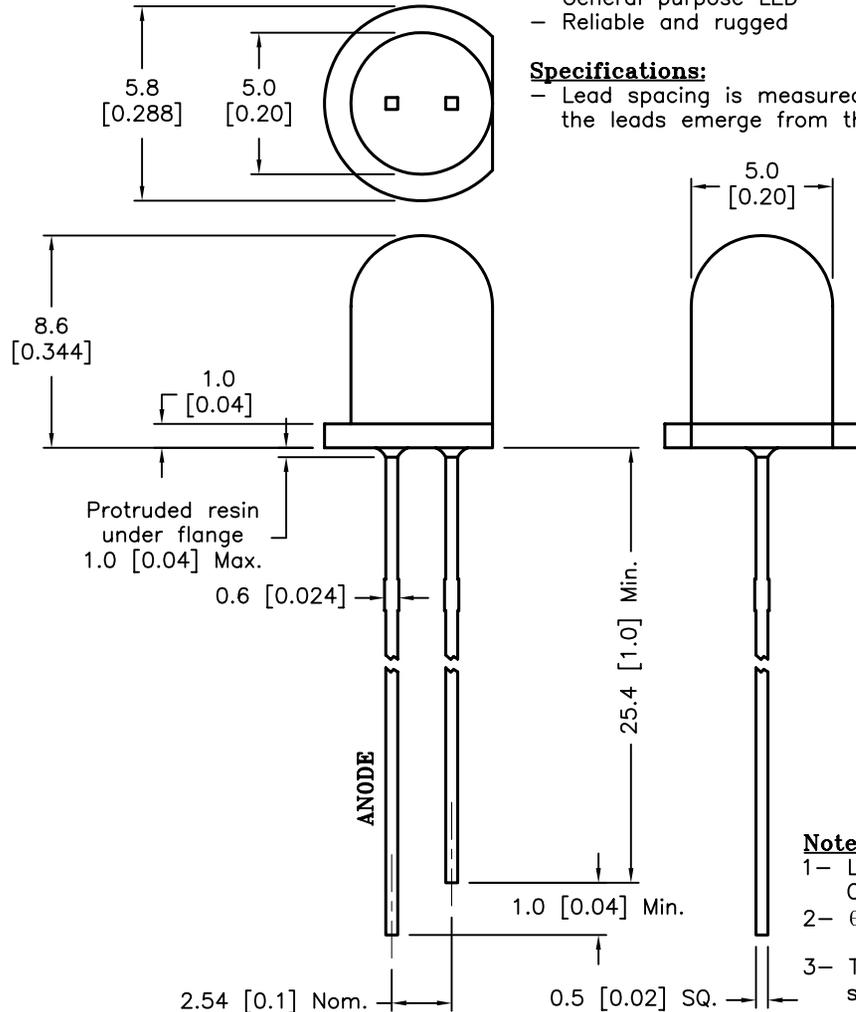
**Features:**

- High intensity
- Standard T-1 3/4 diameter package
- General purpose LED
- Reliable and rugged

**Specifications:**

- Lead spacing is measured where the leads emerge from the package

Source Color	Chip Material	Lens Color
Red	AlGaAs	Diffused



**Absolute Maximum Rating at Ta=25°C**

Parameter	MAX.	Unit
Power Dissipation	80	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current	20	mA
Derating Linear From 50°C	0.4	mA/°C
Reverse Voltage	5	V
Operating Temperature Range	-25°C to +80°C	
Storage Temperature Range	-40°C to +100°C	
Lead Soldering Temperature [4mm (0.157) From Body]	260°C for 5 seconds	

**Electrical Optical Characteristics at Ta=25°C**

Parameter	Symbol	Min.	Typ.	Max	Unit	Test Condition
Luminous Intensity	I <sub>v</sub>		20		mcd	I <sub>f</sub> =20mA (Note 1)
Viewing Angle	2θ <sub>1/2</sub>		65		Deg	(Note 2)
Peak Emission Wavelength	λ <sub>p</sub>		640		nm	I <sub>f</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		635		nm	I <sub>f</sub> =20mA (Note 3)
Spectral Line Half-Width	Δλ		25		nm	I <sub>f</sub> =20mA
Forward Voltage	V <sub>f</sub>		2.0	2.5	V	I <sub>f</sub> =20mA
Reverse Current	I <sub>R</sub>	---	---	100	μA	V <sub>R</sub> =5V

**Notes:**

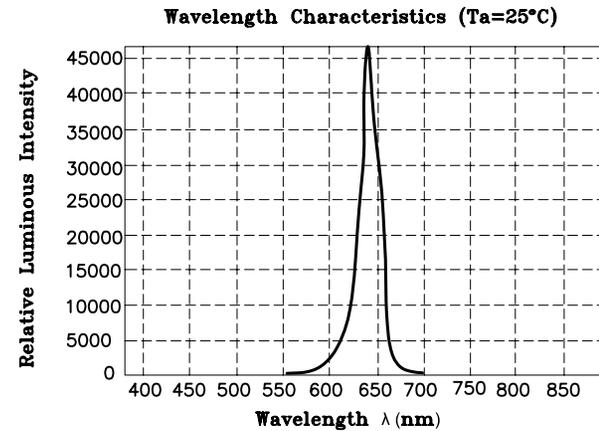
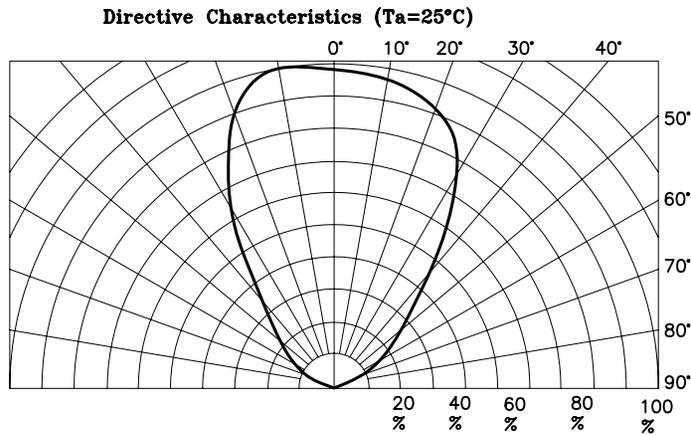
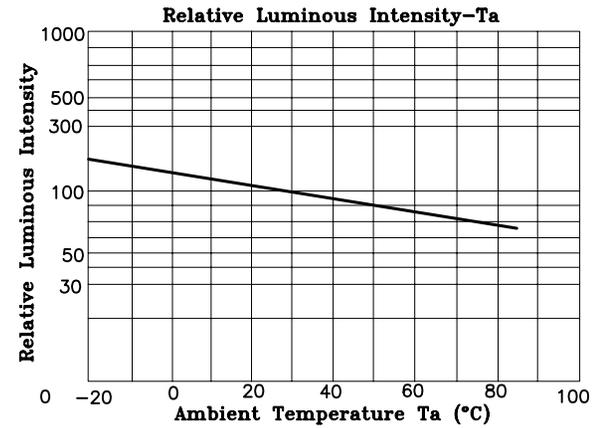
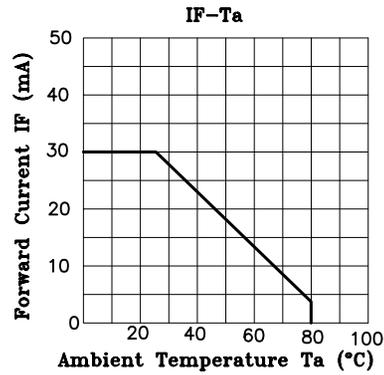
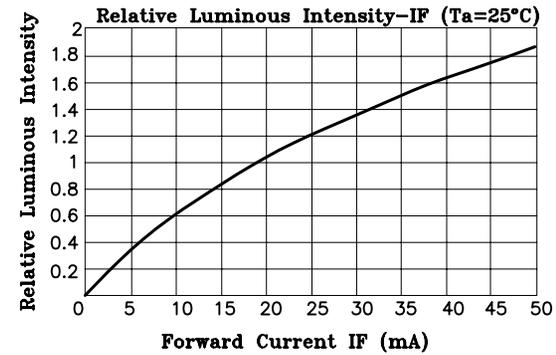
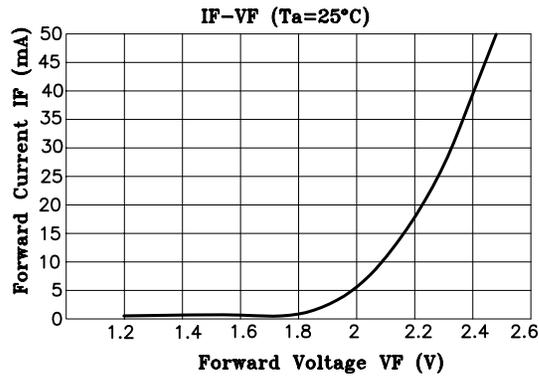
- 1- Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- 2- θ<sub>1/2</sub> is the off-axis angle at which the luminous intensity is half the axial luminous intensity
- 3- The dominant wavelength (λ<sub>d</sub>) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

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TOLERANCES:  
UNLESS OTHERWISE SPECIFIED,  
±0.25 [±0.010]

DRAWN BY:	DATE:
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YILMAZ AKYONDEM	6/19/06
APPROVED BY:	DATE:
HISHAM ODISH	6/19/06

DRAWING TITLE: Standard LED, Round Lens, 5mm (T1 3/4), Red Emitting Color			
SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	MV5753	87K7102.DWG	A
SCALE: NTS	U.O.M.: mm [INCHES]	SHEET: 1 OF 2	



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SIZE <b>A</b>	DWG. NO. <b>MV5753</b>	ELECTRONIC FILE <b>87K7102.DWG</b>	REV <b>A</b>
SCALE: NTS	U.O.M.: mm [INCHES]	SHEET: 2 OF 2	