



MASTER INSTRUMENT CORPORATION

MODEL NO. : MLL-50231

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nFeatures:

- I HIGH EFFICIENCY, LOWPOWER CONSUMPTION LED.
- I PEAK WAVELENGTH IS 700nm
- I 25 DEGREE VIEW ANGLE

nApplications:

- I DIRECT LIGHT ONLY
- I INDOOR SIGN USAGE

Dics Material	Light Color	Lens Color
Gap	Bright Red	Red Diffused

Absolute Ratings

(Ta=25°C)

Item	Symbol	Maximum	Unit
Power Dissipation	P <sub>D</sub>	60	mW
Continuous Forward Current	I <sub>F</sub>	20	mA
Peak Forward Current (1/10 Duty Cycle 0.1ms Pulse Width)	I <sub>FP</sub>	60	mA
Reverse Voltage	V <sub>R</sub>	5	V
Derating Linear Form 25°C		0.21	MA/°C
Operating temperature Range	Topr	-25 to +100	°C
Storage Temperature Range	Tstg	-40 to +100	°C

\*\*Condition for IFP is pulse of 1/10 duty and 0.1 msec width.

\*\*Solder temperature 1.6mm from body for 5 seconds at 250°C ±5°C.

CHARACTERISITIC

(Ta=25°C)

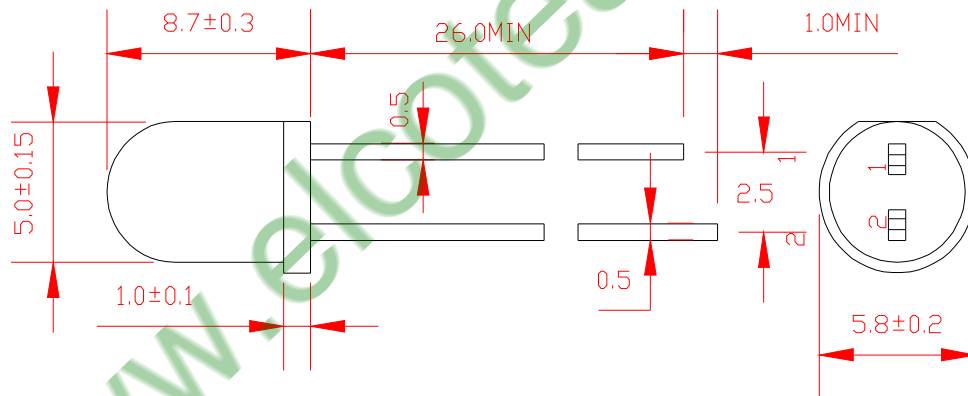
Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V <sub>F</sub>	IF=20mA		2.2	2.5	V
Reverse Current	I <sub>R</sub>	VR=5V			10	uA
Peak Emission Wavelength	λ <sub>p</sub>	IF=20mA		700		nm
Viewing Angle	2θ <sub>1/2</sub>	IF=20mA		25		Deg
Luminous Intensity	I <sub>v</sub>	IF=20mA	8	16		mcd



U Package Dimensions (Unit: mm)

P-8

- 1. Cathode
- 2. Anode



Protruded resin under flange 1.0mm MAX



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□ Typical Optical-Electrical Characteristic Curves

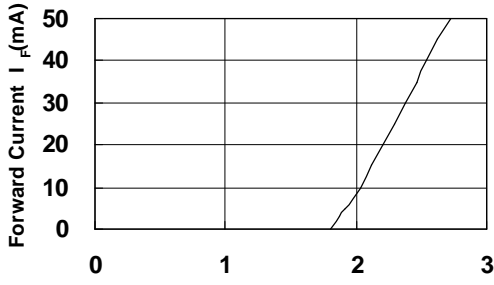


FIG1. FORWARD CURRENT VS. FORWARD VOLTAGE

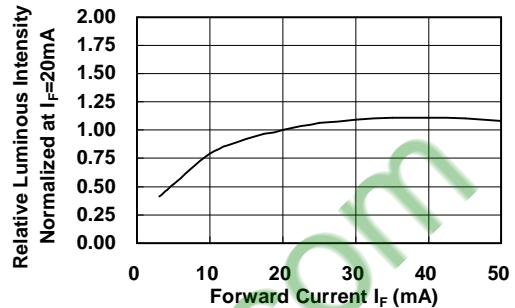


FIG2. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

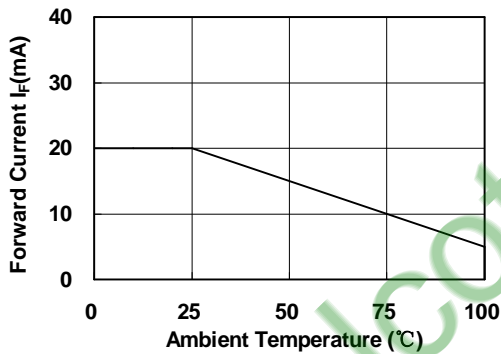


FIG3. FORWARD CURRENT VS. AMBIENT TEMPERATURE

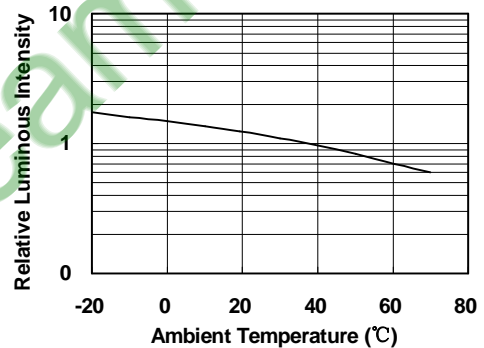
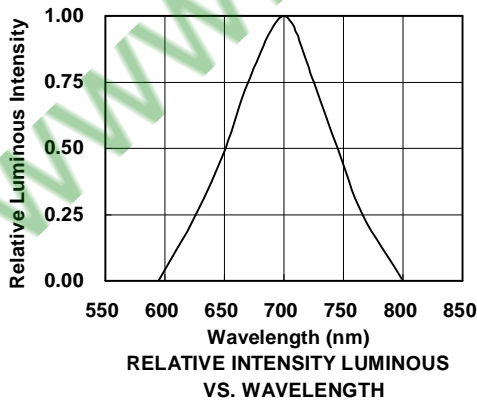


FIG4. LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE



RELATIVE INTENSITY LUMINOUS VS. WAVELENGTH

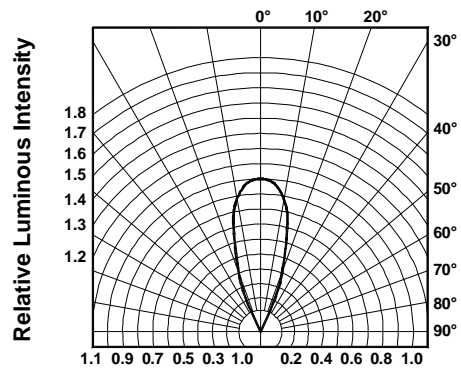


FIG6-46. SPATIAL DISTRIBUTION