



MASTER INSTRUMENT CORPORATION

MODEL NO. : MLL-50531

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nFeatures:

- I HIGH EFFICIENCY, LOWPOWER CONSUMPTION LED.
- I PEAK WAVELENGTH IS 590nm
- I 25 DEGREE VIEW ANGLE

nApplications:

- I DIRECT LIGHT ONLY

Dics Material	Light Color	Lens Color
GaAsp	Yellow	Yellow Diffused

Absolute Ratings

(Ta=25°C)

Item	Symbol	Maximum	Unit
Power Dissipation	P _D	80	mW
Continuous Forward Current	I _F	20	mA
Peak Forward Current (1/10 Duty Cycle 0.1ms Pulse Width)	I _{FP}	100	mA
Reverse Voltage	V _R	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)

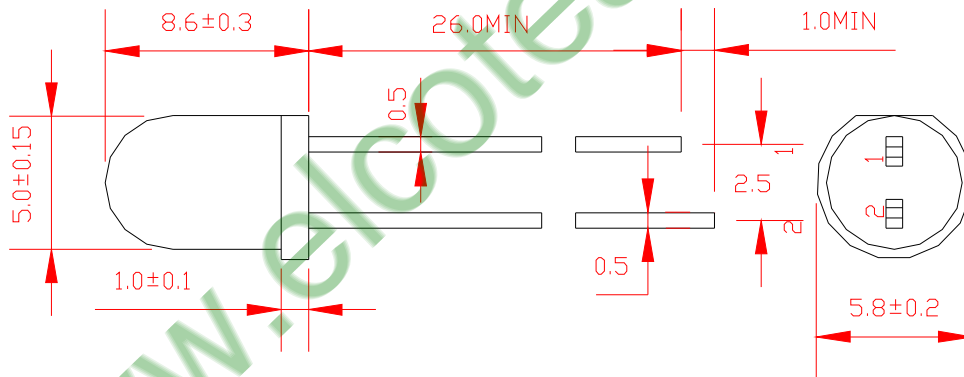
Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	IF=20mA		2.2	2.5	V
Reverse Current	I _R	VR=5V			10	uA
Peak Emission Wavelength	λ _p	IF=20mA		590		nm
Viewing Angle	2θ _{1/2}	IF=20mA		25		Deg
Luminous Intensity	I _v	IF=20mA	15	30		mcd



U Package Dimensions (Unit: mm)

P8-1-1

- 1. Cathode
- 2. Anode



Protruded resin under flange 1.0mm MAX



□ Typical Optical-Electrical Characteristic Curves

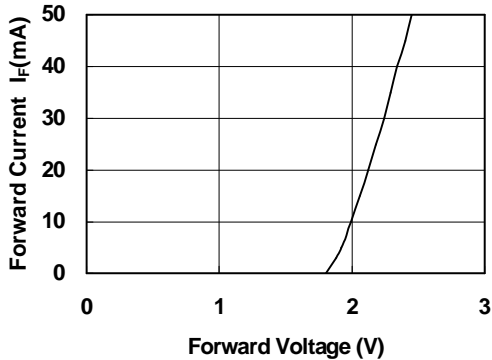


FIG1. FORWARD CURRENT VS. FORWARD VOLTAGE

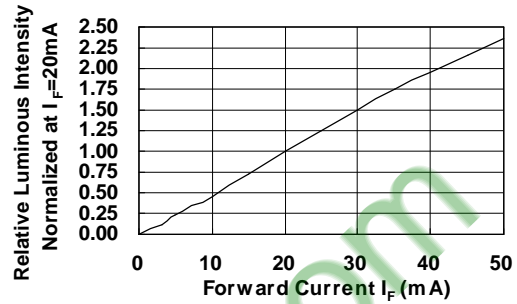


FIG2. RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

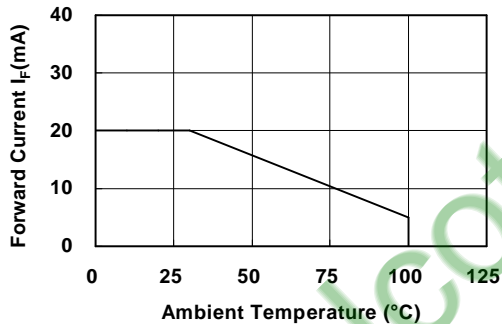


FIG3-26. FORWARD CURRENT VS. AMBIENT TEMPERATURE

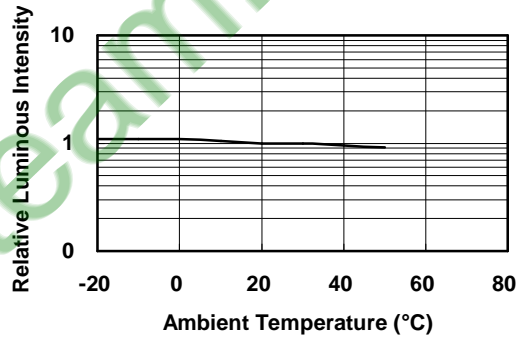


FIG4. LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

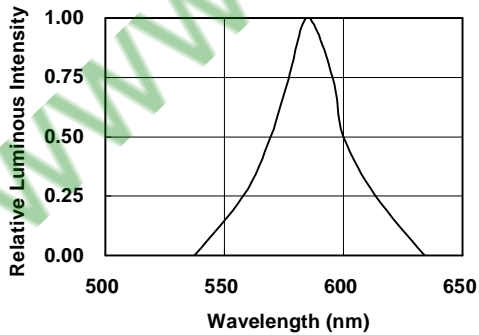


FIG5. RELATIVE INTENSITY LUMINOUS VS. WAVELENGTH

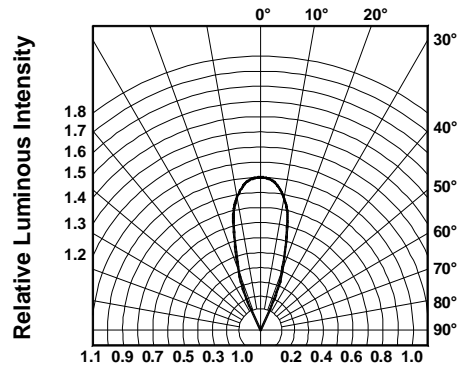


FIG6-46. SPATIAL DISTRIBUTION