



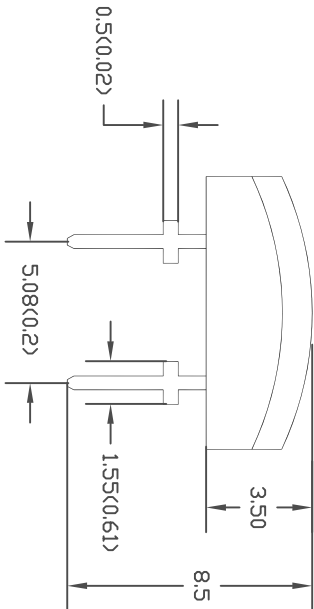
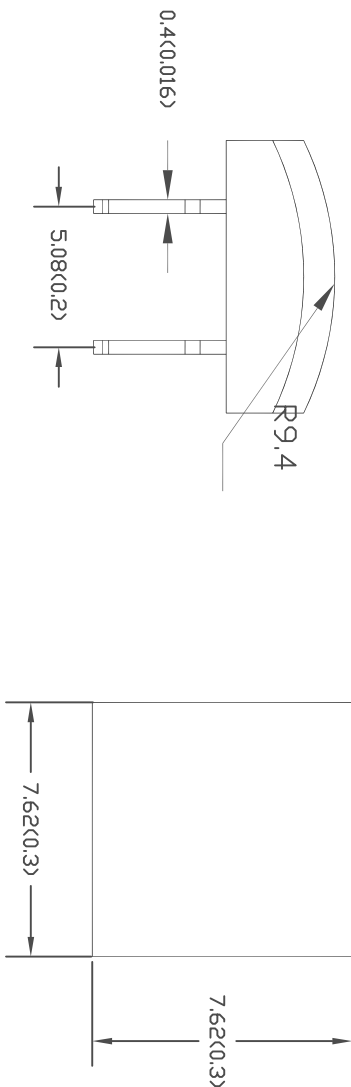
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SPC-F005.DWG

REVISIONS				DOC. NO.	SPC-F005	*	Effective	7/8/02	*	DCP No	1398
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRV	DATE			
XX	XX	XXXX	XXXX	11-09-08	XXXX	11-09-08	XXXX	11-09-08			
XXXX	XXXX		XXXX	11-09-08	XXXX	11-09-08	XXXX	11-09-08			

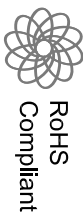
**Package Dimension:**



Part No	Chip Material	Lens Color	Source Color
ETG-PRG590-180	AlInGaP	Water Clear	Yellow

**Notes:**

- All dimensions are in millimeters (inches).
- Tolerance is  $\pm 0.25\text{mm}$  ( $0.010''$ ) unless otherwise noted.
- Protruded resin under flange is  $1.0\text{mm}$  ( $0.04''$ ) max.
- Lead spacing is measured where the leads emerge from the package.
- Specifications are subject to change without notice.
- This data-sheet only valid for six months.



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APPROVED BY:	XXXX	DATE:	11-09-08

**DRAWING TITLE:**

Multi - Color LED

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	MC24175	02P5899	
SCALE:	NTS	U.D.M.: INCHES [mm]	SHEET: 1 OF 1



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SPC-F005.DWG

REVISONS		DESCRIPTION		DOC. NO.	SPC-F005	Effective: 7/8/02	DCP No: 1398
DCP #	REV	DESCRIPTION	DATE	CHECKD	DATE	APPRVI	DATE
XX	XX	XXXX	23-09-08	XXXX	23-09-08	XXXX	23-09-08
XXXX	XXXX		23-09-08	XXXX	23-09-08	XXXX	23-09-08

### Absolute Maximum Ratings

(Ta=25°C)

Parameter	Max.	Unit
Power Dissipation	120	mW
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Continuous Forward Current	50	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(157°) From Body)	260°C for 5 Seconds	

### Electro-optical Characteristics

(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	Iv	---	600	---	mcd	I <sub>f</sub> =30mA (Note 1)
Viewing Angle	2θ <sub>1/2</sub>	---	140	---	Deg	(Note 2)
Peak Emission Wavelength	λp	---	590	---	nm	I <sub>f</sub> =30mA
Spectral Line Half-Width	*Cλ	---	25	---	nm	I <sub>f</sub> =30mA
Dom Emission Wavelength	λd	---	588	---	nm	I <sub>f</sub> =30mA
Forward Voltage	V <sub>f</sub>	---	2.2	2.6	V	I <sub>f</sub> =30mA
Reverse Current	I <sub>r</sub>	---	---	100	μA	V <sub>r</sub> =5V

#### Notes:

- Luminous Intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- θ<sub>1/2</sub> is the off-axis angle at which the luminous intensity is half the axial luminous intensity
- 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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SCALE:	NTS	U.D.M:	INCHES [mm]
		SHEET:	1 OF 1



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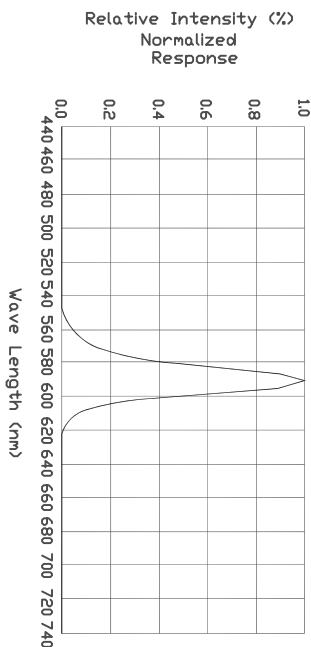
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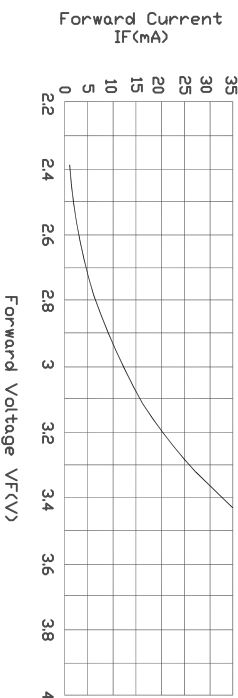
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XXXX	XXXX		XXXX	25-09-08	XXXX	25-09-08	XXXX	25-09-08

### Typical Electrical/Optical Characteristics Curves (25°C Ambient Temperature Unless Otherwise Noted)

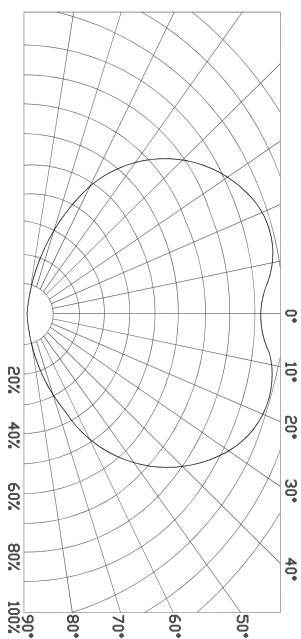
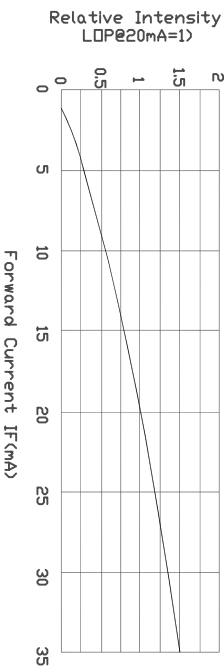
Relative Intensity vs. Wavelength  
Spectral Radiance (Peak @ 590nm)



Forward Current vs Forward Voltage



Relative Luminous Intensity vs Forward Current



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