

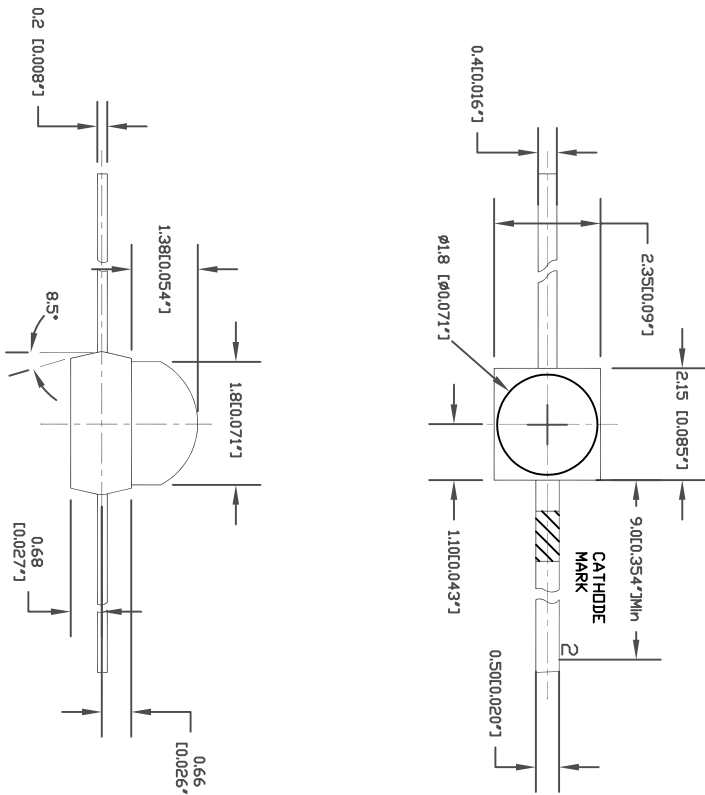


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SPC-F005.DWG

REVISONS		DOC. NO.	SPC-F005	*	Effective	7/8/02	*	Doc No	1398
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVI	DATE	
XX	XX	XXXX	XXXX	12-09-08	XXXX	12-09-08	XXXX	12-09-08	
XXXX	XXXX		XXXX	12-09-08	XXXX	12-09-08	XXXX	12-09-08	

**Package Outlines**



ITEM	MATERIALS
Resin (mold)	Epoxy
Bonding Wire	Ø 25 µm Au
Lens color	Water Clear
Dice	InGaN/SiC
Emitted color	Green

**NOTES**

1. All dimensions are in millimeters (inches);
2. Tolerances are ±0.1mm (0.004inch) unless otherwise noted.



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**DRAWING TITLE:**

**Multi-Color LED**

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	MC24140	02P5885	XX
SCALE:	NTS	U.D.M.: INCHES [mm]	SHEET: 1 OF



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XXXX	XXXX			XXXX	23-09-08	XXXX	23-09-08	XXXX	23-09-08

### Absolute Maximum Ratings

(TA=25°C)

Parameter	Symbol	Value	Unit
Power dissipation	Pd	120	mW
Forward current	If	30	mA
Reverse voltage	Vr	5	V
Operating temperature range	Top	-20~+80	°C
Storage temperature range	Tstg	-20~+80	°C
Peak pulsing current (1/8 duty f=1kHz)	Ifp	125	mA
Lead Soldering Temperature	Tsol	260°C For 5 SEC (5mm[0.20"] from body)	

### Electro-optical Characteristics

(TA=25°C)

Parameter	Test Condition	Symbol	Value			Unit
			Min	Typ	Max	
Wavelength at peak emission	If=20mA	$\lambda_{peak}$	500	510	515	nm
Spectral half bandwidth	If=20mA	$\Delta\lambda$	--	20	--	nm
Dominant wavelength	If=20mA	$\lambda_{dom}$	--	505	--	nm
Forward voltage	If=20mA	Vf	--	3.2	3.8	V
Luminous intensity	*I1 If=20mA	Iv	--	300	--	mcd
Viewing angle at 50% Iv	If=10mA	2 $\theta_{1/2}$	--	20	--	Deg
Reverse current	Vr=-5V	Ir	--	--	10	$\mu$ A

\* 1 Note: Luminous intensity tolerances are  $\pm 10\%$



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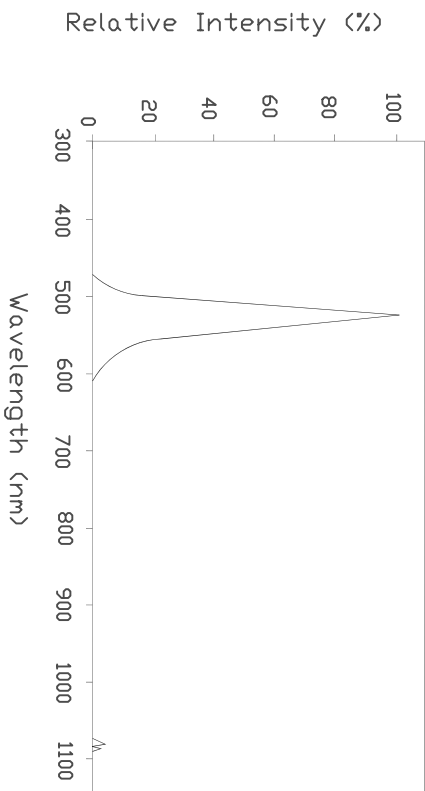
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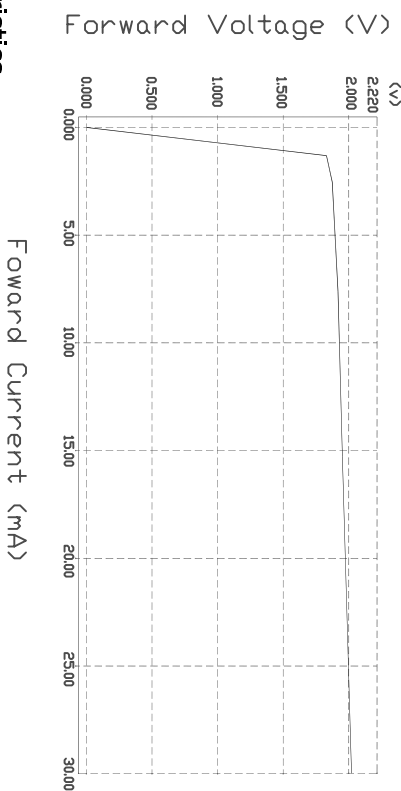
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**OPTICAL CHARACTERISTIC CURVES**

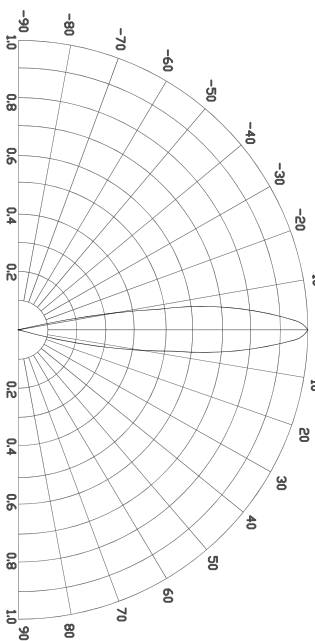
**Relative Intensity vs. Wavelength**



**Forward Current vs. Forward Voltage**



**Directive Characteristics**



**Multi-Color LED**

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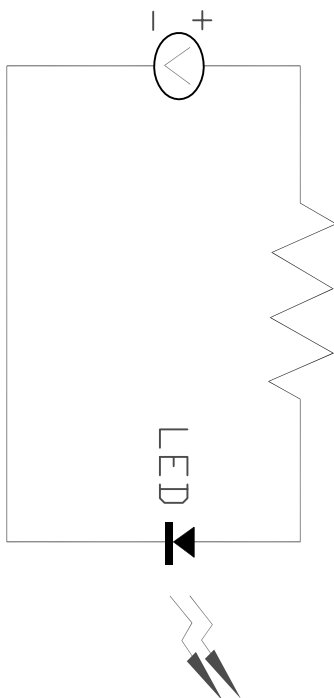
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REVOLUTIONS		DOC. NO. SPC-F005	* Effective: 7/8/02	* DCP No: 1398				
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■ Test Circuit



■ Handling Precautions

1. Over-current-proof

Customer must apply resistor for protection; otherwise slight voltage shift will cause big current change (Burn out will happen).

2. Storage

2.1 It is recommended to store the products in the following conditions:

Humidity: 60% R.H. Max.

Temperature: 5°C-30°C (41F-86F)

2.2 Shelf life in sealed bag: 12 month at <5°C-30°C and <30% R.H. after the package is opened, the products should be used within a week or they should be keeping to stored at  $\leq 20$  R.H. with zip-lock sealed.

3. Baking

It is recommended to baking before soldering when the pack is unsealed after 72hrs.

The Conditions are as follows:

3.1 60±3°C x(12-24hrs) and <5%RH, taped reel type

3.2 100±3°C x(45min-1hr), bulk type

3.3 130±3°C x(15-30min), bulk type

When you discover that the desiccant in the package has a pink color (normal=blue), you should treat them in the same conditions as (3.1-3.3)



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CHECKED BY:	DATE:	SCALE:	U.O.M.: INCHES [mm]
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APPROVED BY:	DATE:	ELECTRONIC FILE	SHEET: 1 OF 1
XXXX	22-09-08	02P5885	
		REV	
		XX	

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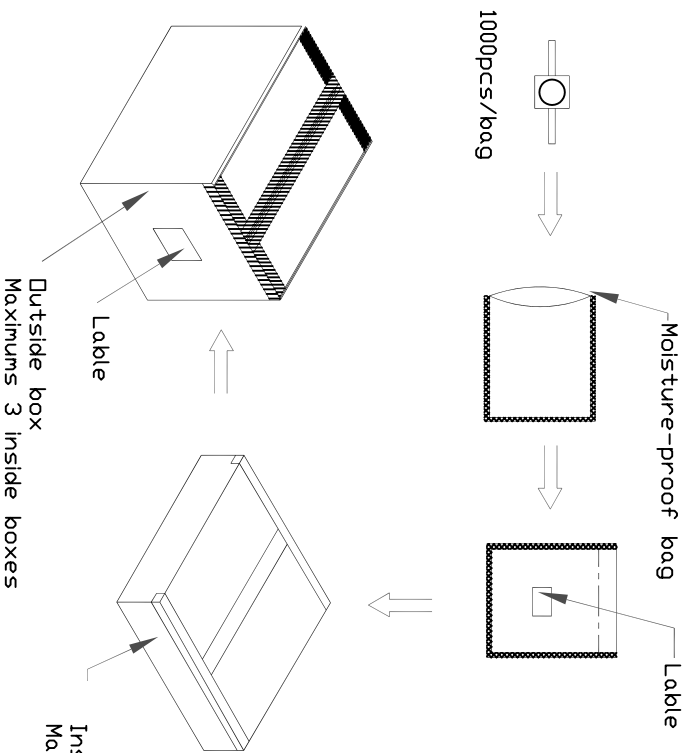
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**Packaging Specifications**

**NOTES:**

Products (numbers of products are 1,000pcs) packed in a seal off moisture-proof bag along with a desiccant one by one, 50 moisture-proof bag of maximums (total maximum number of products are 50,000pcs) packed in an inside box (size: about 350mm x about 300mm x about 105mm) and three inside boxes of maximums are put in the outside box (size: about 360mm x about 320mm x about 330mm) Together with buffer material, and it is packed. (Part No., Lot No., quantity should appear on the label on the moisture-proof bag, part No. And quantity should appear on the label on the cardboard box.) The number of the loading steps of outside box (cardboard box) has it to three steps.



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