



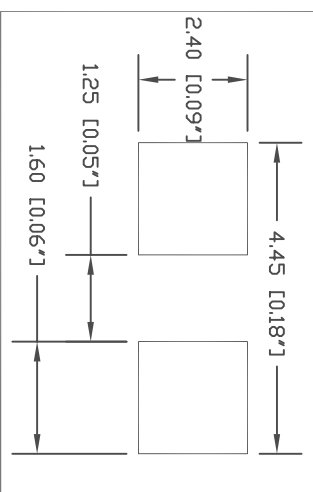
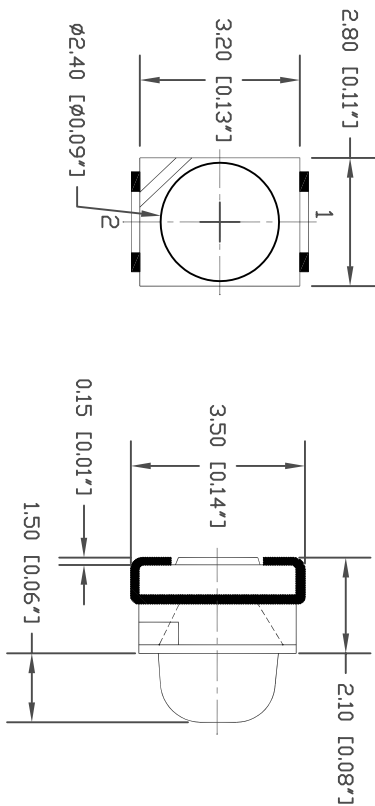
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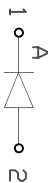
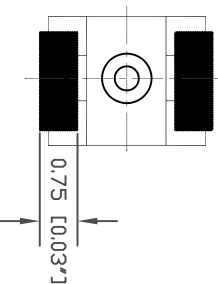
SPC-F005.DWG

REVISONS		DCI. NO.	SPC-F005	*	Effective	7/8/02	*	DCP No	1398
DCP #	REV	DESCRIPTION		DRAWN	DATE	CHECKD	DATE	APPRVI	DATE
XX	XX	XXXX		XXXX	18-09-09	XXXX	18-09-09	XXXX	18-09-09
XXXX	XXXX			XXXX	18-09-09	XXXX	18-09-09	XXXX	18-09-09

Package Outlines



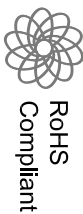
RECOMMEND PAD LAYOUT



- NOTES:
1. All dimensions are in millimeters (inches).
 2. Tolerances are $\pm 0.2\text{mm}$ (0.08inch) unless otherwise noted.

ITEM	MATERIALS
Resin	Epoxy
Bonding Wire	$\phi 25\mu\text{Au}$
Lens color	Water transparent
Dice	AlGaNp
Emitted color	Yellow

Attention:
Observe Precautions For Handling
Electrostatic Sensitive Devices



RoHS
Compliant

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XXXX	18-09-09
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APPROVED BY:	DATE:
XXXX	18-09-09

DRAWING TITLE:

Multi - Color LED

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	MC24163	02P5958	XX
SCALE:	NTS	U.D.M.: INCHES [mm]	SHEET: 1 OF



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SPC-F005.DWG

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DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVI	DATE	
XX	XX	XXXX	XXXX	22-09-08	XXXX	22-09-08	XXXX	22-09-08	
XXXX	XXXX		XXXX	22-09-08	XXXX	22-09-08	XXXX	22-09-08	

Absolute Maximum Ratings

(TA=25°C)

Parameter	Symbol	Value	Unit
Forward current	If	30	mA
Reverse voltage	Vr	5	V
Power dissipation	Pd	75	mW
Operating temperature range	Top	-20~+80	°C
Storage temperature range	Tstg	-40~+100	°C
Peak pulsing current (1/8 duty f=1kHz)	Ifp	125	mA

Electro-optical Characteristics

(TA=25°C)

Parameter	Test Condition	Symbol	Value		Unit	
			Min	Typ		Max
Wavelength at peak emission	If=20mA	λ_{peak}	--	595	nm	
Spectral half bandwidth	If=20mA	$\Delta\lambda$	--	20	nm	
Dominant wavelength	If=20mA	λ_{dom}	583	590	595	nm
Forward voltage	If=20mA	Vf	--	2.2	2.7	V
Luminous intensity	*I1 If=20mA	Iv	--	--	--	mcd
Viewing angle at 50% Iv	If=10mA	2 $\theta_{1/2}$	--	30	--	Deg
Reverse current	Vr=5V	Ir	--	--	10	μ A

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



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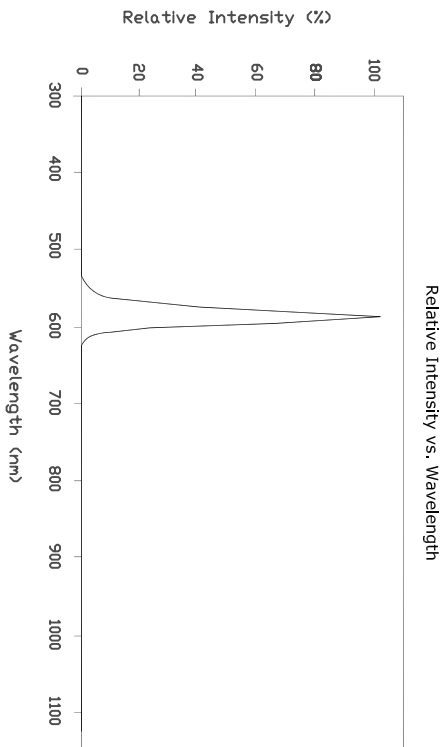
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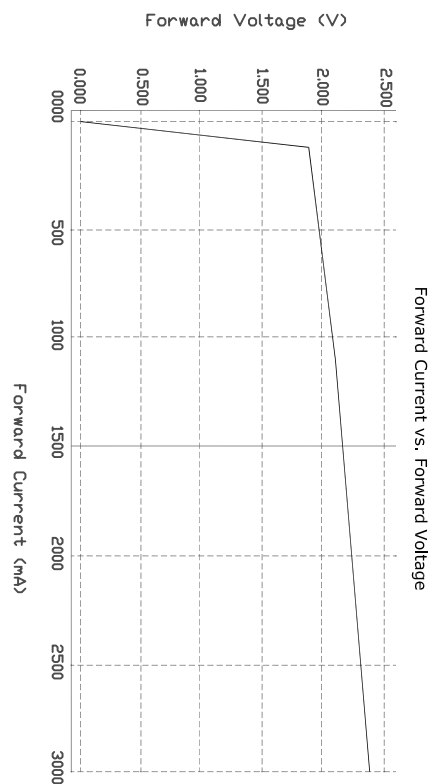
SPC-F005.DWG

REVISIONS		DOC. NO. SPC-F005	* Effective: 7/8/02	* DCP No: 1398				
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRD	DATE
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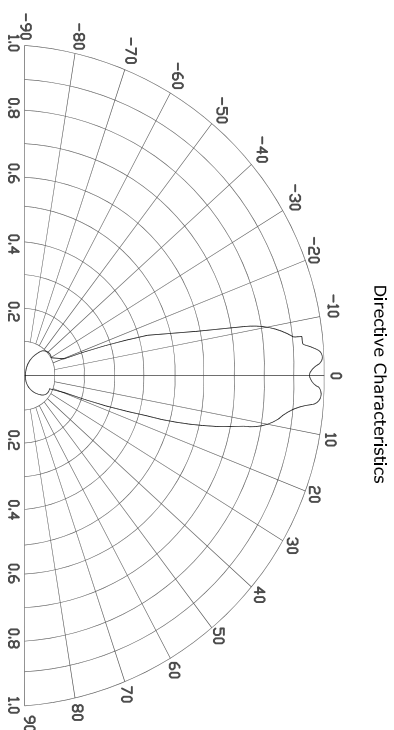
OPTICAL CHARACTERISTIC CURVES



Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage



Directive Characteristics



RoHS
Compliant

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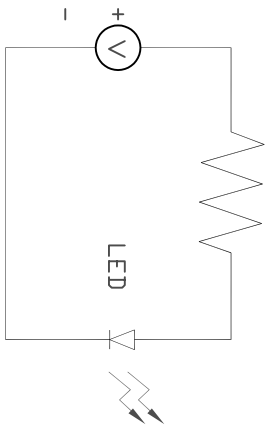
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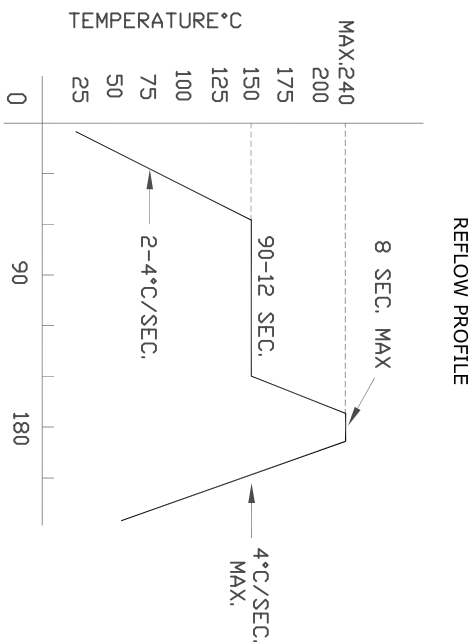
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• **Test Circuit**



• **Reflow Temp/Time**



• **Handling Precautions**

- Over-current-proof
Customer must apply resistors for protection; otherwise slight voltage shift will cause big current change (Burn out will happen).
- Storage
 - It is recommended to store the products in the following conditions:
Humidity: 60% RH, Max. Temperature : 5°C~30°C (41°F~86°F)
 - Shelf life in sealed bag: 12 month at <5°C~30°C and <30% RH, after the package is opened, the products should be used within a week or they should be keeping to stored at ≤ 20 RH, with zip-lock sealed.
 - Baking
It is recommended to baking before soldering when the pack is unsealed after 72hrs. The Conditions are as followsings:
 - 60±3°C x (12~24hrs) and <5%RH, taped reel type
 - 100±3°C x (45min~1hr), bulk type
 - 130±3°C x (15~30min), bulk type

• **Soldering Iron**

Basic spec is ≤ 5sec when 260°C. If temperature is higher, time should be shorter (+10°C → -1sec). Power dissipation of iron should be smaller than 15W and temperatures should be controllable. Surface temperature of the device should be under 230°C.



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