



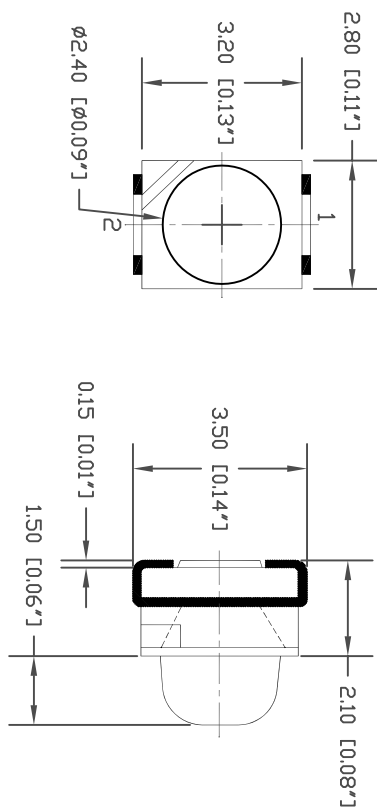
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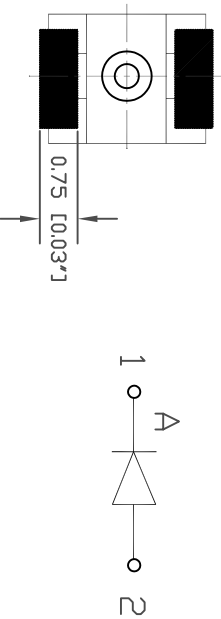
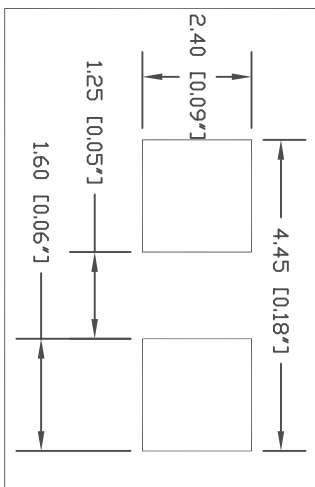
SPC-F005.DWG

REVISONS		DOC. 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



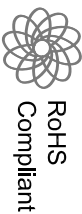
NOTES:

1. All dimensions are in millimeters (inches).
2. Tolerances are ±0.2mm (0.008inch) unless otherwise noted.

Attention:

Observe Precautions For Handling Electrostatic Sensitive Devices

ITEM	MATERIALS
Resin	Epoxy
Bonding Wire	φ25μAu
Lens color	Water transparent
Dice	AlGaNp
Emitted color	Yellow



RoHS
Compliant

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

DRAWING TITLE:

Multi - Color LED

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	MC24162	02P5957	XX
SCALE:	NTS	U.D.M.: INCHES [mm]	SHEET: 1 OF



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DCP #	REV			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}	--	635	--	nm
Spectral half bandwidth	If=20mA	$\Delta\lambda$	--	20	--	nm
Dominant wavelength	If=20mA	λ_{dom}	620	625	630	nm
Forward voltage	If=20mA	Vf	--	2.2	2.7	V
Luminous intensity	*1 If=20mA	Iv	2400	--	--	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 are $\pm 10\%$.



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DRAWN BY: XXXX	DATE: 22-09-08	DRAWING TITLE: Multi Color LED		SCALE: NTS	U.D.M.: INCHES [mm]	SHEET: 1 OF 1
CHECKED BY: XXXX	DATE: 22-09-08	SIZE: A	DWG. NO.: MC24162			
APPROVED BY: XXXX	DATE: 22-09-08	ELECTRONIC FILE: 02P5957		REV: XX		

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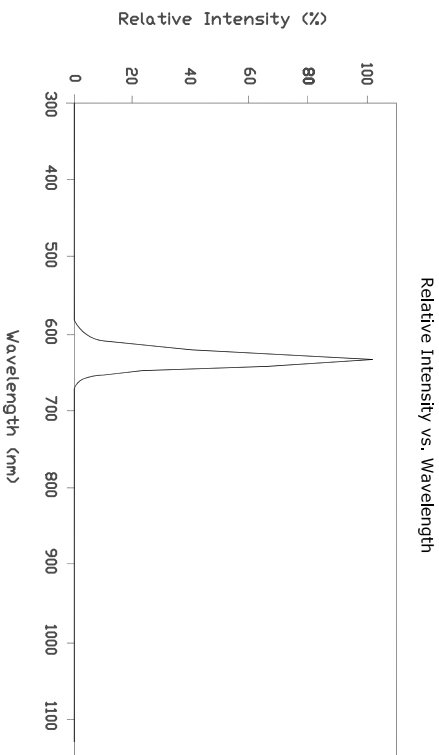
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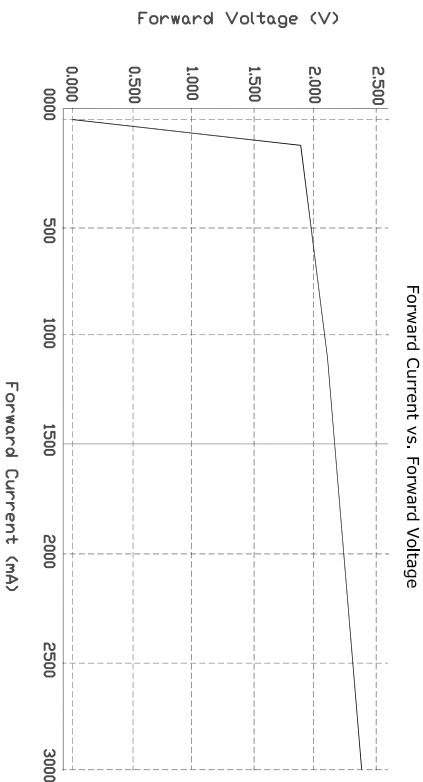
SPC-F005.DWG

REVISIONS		DOC. NO. SPC-F005	* Effective: 7/8/02	* DCP No: 1398				
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRD	DATE
XX	XX	XXXX	XXXX	25-09-08	XXXX	25-09-08	XXXX	25-09-08
XXXX	XXXX		XXXX	25-09-08	XXXX	25-09-08	XXXX	25-09-08

OPTICAL CHARACTERISTIC CURVES

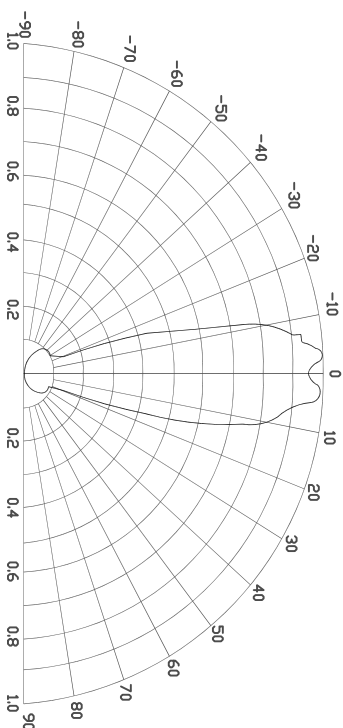


Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage

Directive Characteristics



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SCALE:	NTS	U.O.M.: INCHES [mm]	SHEET: 1 OF 1



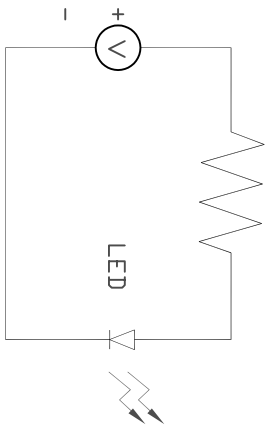
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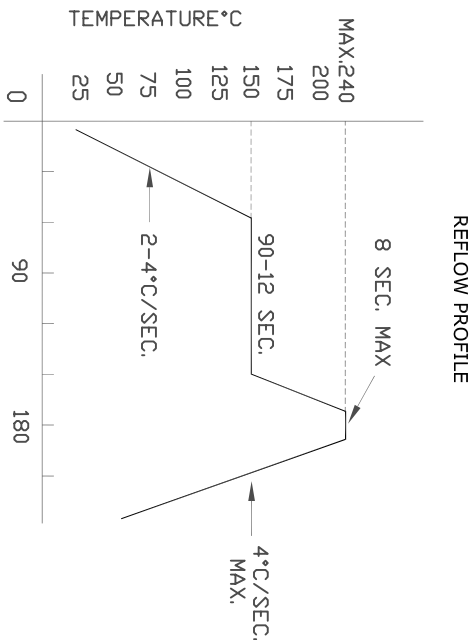
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XX	XX	XXXX	XXXX	25-09-08	XXXX	25-09-08	XXXX
XXXX	XXXX		XXXX	25-09-08	XXXX	25-09-08	XXXX

• 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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A	MC24162	25-09-08	XXXX	25-09-08	XXXX	25-09-08	XX
SCALE:	NTS	U.D.M:	INCHES [mm]	SHEET:	1	OF	1

Multi Color LED

ELECTRONIC FILE

02P5957

XX