

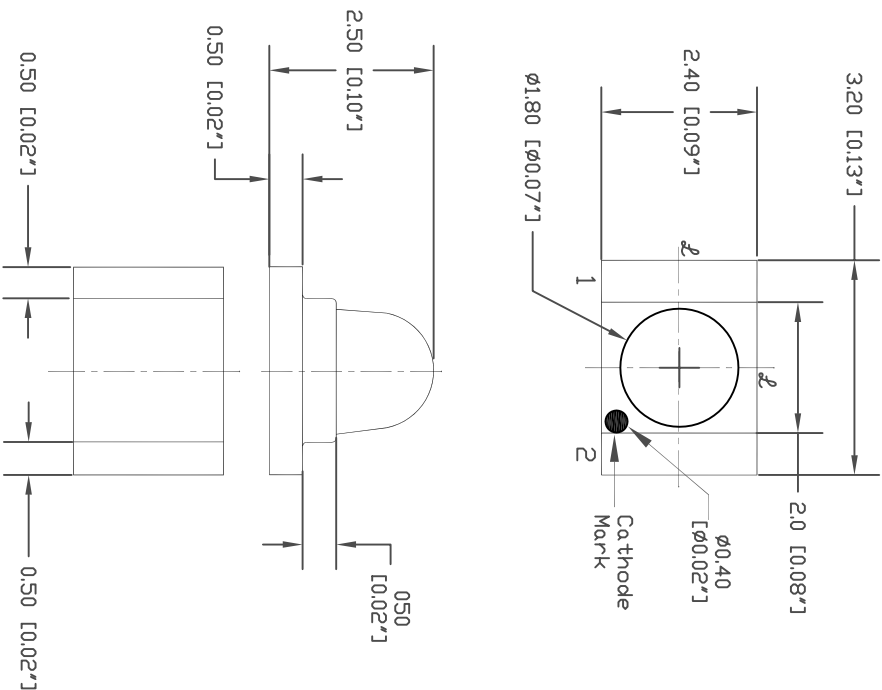


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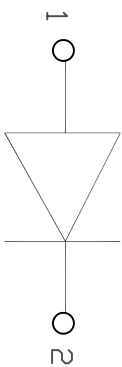
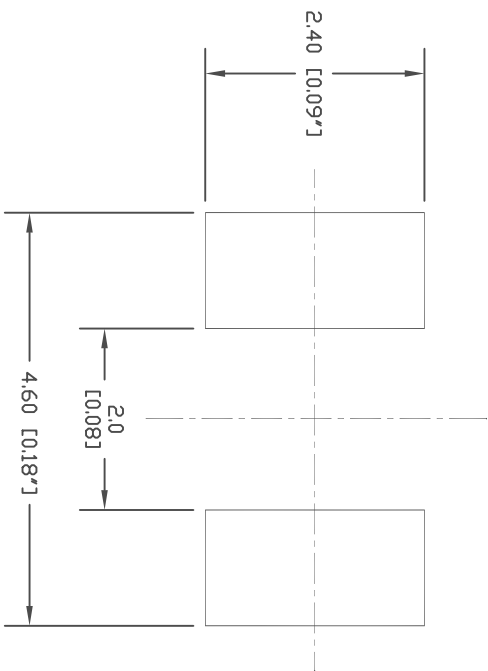
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SPC-F005.DWG

REVISONS		DOC. NO.	SPC-F005	*	Effective:	7/8/02	*	DCP No:	1398
DGP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVI	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	

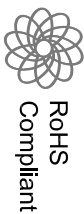
Package Outlines



RECOMMENDED PAD LAYOUT



ITEM	MATERIALS
Resin (mold)	Epoxy
Bonding Wire	ø25mm Au
Lens color	Water clear
Printed circuit board	BT (white)
Dice	Incan/SiC
Emitted color	White



- NOTES:
1. All dimensions are in millimeters (inches)
 2. Tolerances are 0.1mm (0.04inch) unless otherwise noted
- Attention: Observe Precautions For Handling Electrostatic Sensitive Devices

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

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APPROVED BY:	XXXX	DATE:	25-09-08

DRAWING TITLE:

Multi Color LED

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	MC24150	02P5945	XX
SCALE:	NTS	U.D.M:	INCHES [mm]
		SHEET:	1 OF 1

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Absolute Maximum Ratings

(TA=25°C)

Parameter	Symbol	Value	Unit
Forward current	If	30	mA
Reverse voltage	Vr	5	V
Power dissipation	Pd	120	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	
CIE Coordinates	If=20mA	X Y	0.22 0.22	0.28 0.31	0.36 0.38	--
Forward voltage	If=20mA	Vf	--	3.5	4.0	V
Luminous Intensity	*1 If=20mA	Iv		300		mcd
Viewing angle at 50% Iv	If=10mA	2θ1/2	--	20	--	Deg
Reverse current	Vr=5V	Ir	--	--	10	µA



RoHS
Compliant

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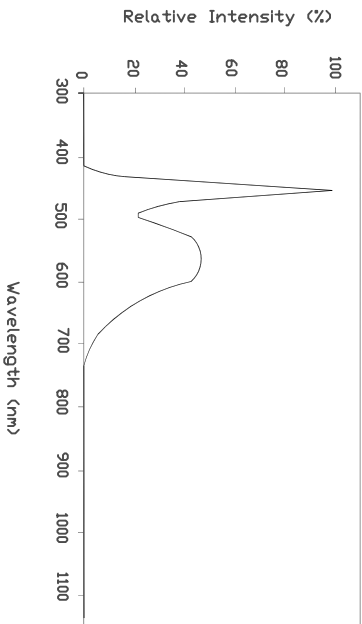
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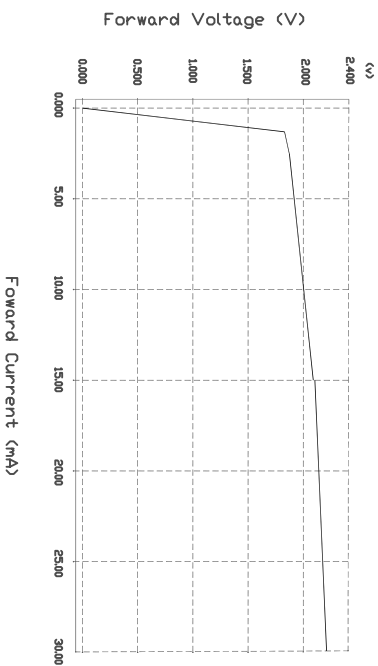
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OPTICAL CHARACTERISTIC CURVES

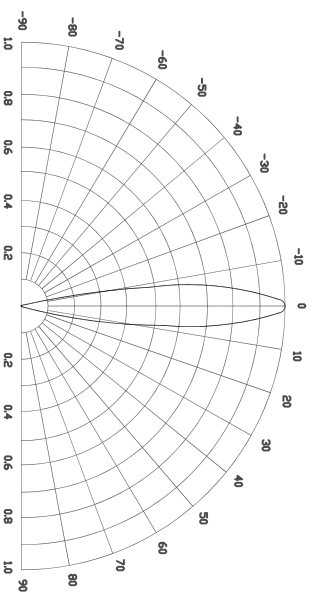
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage



Directive Characteristics



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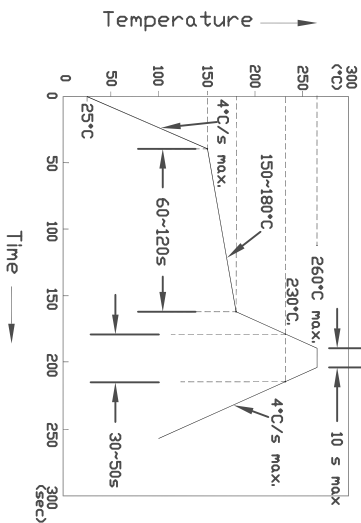
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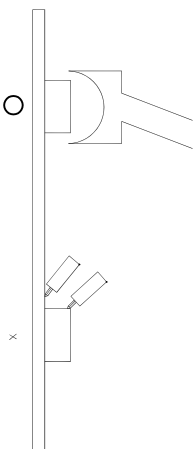
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Reflow Temp/Time

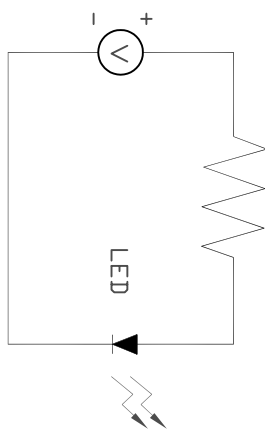


- NOTES:
- 1. We recommend the reflow temperature 245°C (±5°C), the maximum soldering temperature should be limited to 260°C.
- 2. don't cause stress to the epoxy resin while it is exposed to high temperature.
- 3. Number of reflow process shall be 2 times or less.

- 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 Temperature should be controllable. Surface temperature of the device should be under 230°C.
- Rework
- 1. Customer must finish rework within 5 sec under 260°C.
- 2. The head of iron can not touch copper foil
- 3. Twin-head type is preferred.



Test Circuit



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 follows:
 - 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



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