



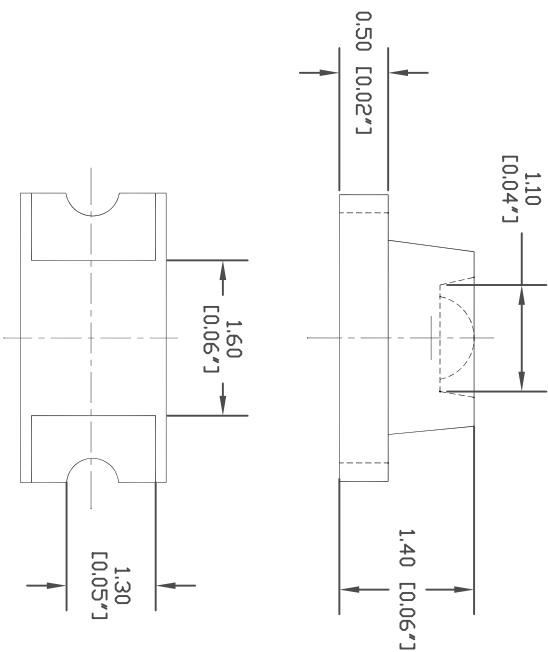
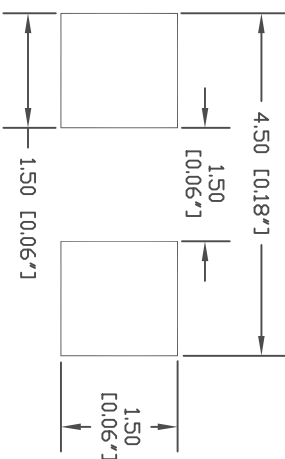
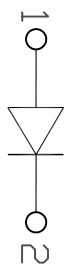
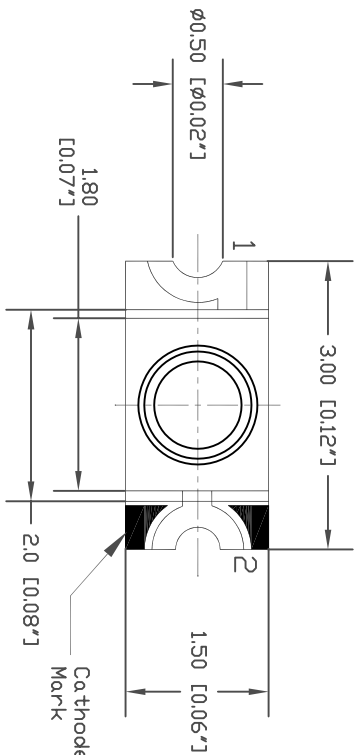
SPC  
TECHNOLOGY

ALL RIGHTS RESERVED. NO PORTION OF THIS PUBLICATION, WHETHER IN WHOLE OR IN PART CAN BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF SPC TECHNOLOGY.

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	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

**Package Outlines**



- NOTES:
- All dimensions are in millimeters (inches)
  - Tolerances are ±0.1mm (0.004inch) unless otherwise noted.
- Attention:  
Observe Precautions For Handling Electrostatic Sensitive Devices

ITEM	MATERIALS
Resin (mold)	Epoxy
Bonding Wire	φ25μAu
Lens color	Water transparent
Printed circuit board	BT (White)
Dice	InGaN/SiC
Emitted color	Green



RoHS  
Compliant

DISCLAIMER:  
ALL STATEMENTS AND TECHNICAL INFORMATION CONTAINED HEREIN ARE BASED UPON INFORMATION AND/OR TESTS WE BELIEVE TO BE ACCURATE AND RELIABLE. SINCE CONDITIONS OF USE ARE BEYOND OUR CONTROL, THE USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE INTENDED USE AND ASSUME ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH.

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:
XXXX	22-09-08
CHECKED BY:	DATE:
XXXX	22-09-08
APPROVED BY:	DATE:
XXXX	22-09-08

DRAWING TITLE:

Multi Color LED

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	MC24155	02P5950	XX
SCALE:	NTS	U.D.M.: INCHES [mm]	SHEET: 1 OF 1



SPC  
TECHNOLOGY

ALL RIGHTS RESERVED. NO PORTION OF THIS PUBLICATION, WHETHER IN WHOLE OR IN PART CAN BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF SPC TECHNOLOGY.  
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	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	120	mW
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

### Electro-optical Characteristics

(TA=25°C)

Parameter	Test Condition	Symbol	Value		Unit
			Min	Typ	
Wavelength at peak emission	If=20mA	$\lambda_{peak}$	--	525	nm
Spectral half bandwidth	If=20mA	$\Delta\lambda$	--	25	nm
Dominant wavelength	If=20mA	$\lambda_{dom}$	--	525	nm
Forward voltage	If=20mA	Vf	--	3.5	V
Luminous intensity	*1 If=20mA	Iv	--	450	mcd
Viewing angle at 50% Iv	If=10mA	2 $\theta_{1/2}$	--	40	Deg
Reverse current	Vr=5V	Ir	--	10	$\mu$ A

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



RoHS  
Compliant

DISCLAIMER:  
ALL STATEMENTS AND TECHNICAL INFORMATION CONTAINED HEREIN ARE BASED UPON INFORMATION AND/OR TESTS WE BELIEVE TO BE ACCURATE AND RELIABLE. SINCE CONDITIONS OF USE ARE BEYOND OUR CONTROL, THE USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE INTENDED USE AND ASSUME ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH.

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	DATE:
XXXX	22-09-08
CHECKED BY:	DATE:
XXXX	22-09-08
APPROVED BY:	DATE:
XXXX	22-09-08

DRAWING TITLE:

Multi Color LED

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	MC24155	02P5950	XX
SCALE:	NTS	U.D.M:	INCHES [mm]
SHEET:	1	OF	1



SPC TECHNOLOGY

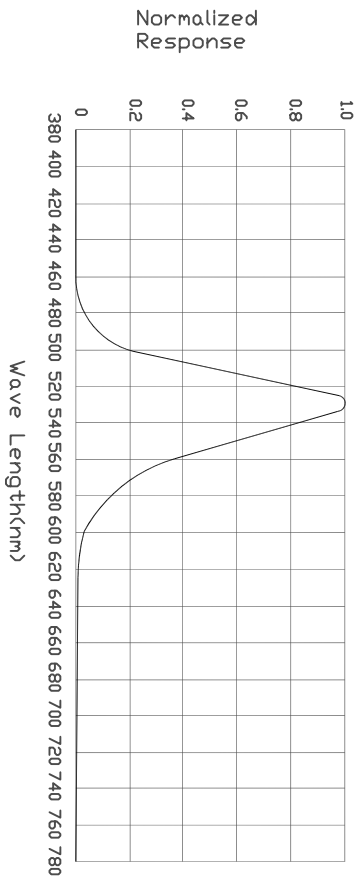
ALL RIGHTS RESERVED. NO PORTION OF THIS PUBLICATION, WHETHER IN WHOLE OR IN PART CAN BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF SPC TECHNOLOGY.

SPC-F005.DWG

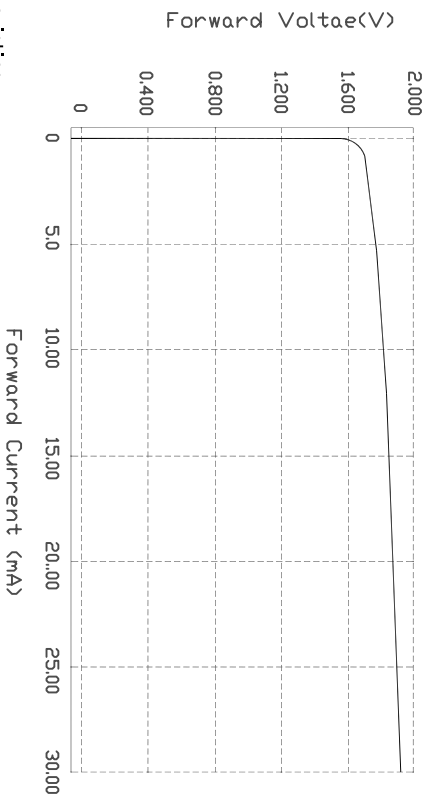
REVISIONS		DCP NO.	SPC-F005	Effective:	7/6/02	DCP No:	1398	
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRD	DATE
XX	XX	XXXX	XXXX	22-09-08	XXXX	22-09-08	XXXX	22-09-08
XXXX	XXXX		XXXX	22-09-08	XXXX	22-09-08	XXXX	22-09-08

### OPTICAL CHARACTERISTIC CURVES

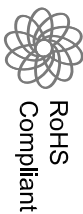
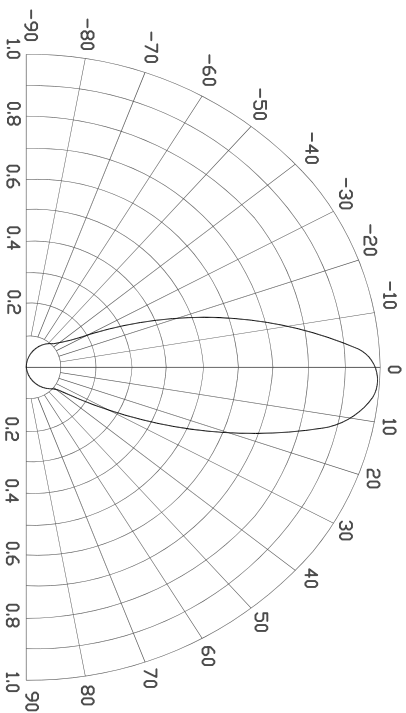
Spectral Radiance (Peak @525nm)



Forward Current vs Forward Voltage



Directive Characteristics



DISCLAIMER: ALL STATEMENTS AND TECHNICAL INFORMATION CONTAINED HEREIN ARE BASED UPON INFORMATION AND/OR TESTS WE BELIEVE TO BE ACCURATE AND RELIABLE. SINCE CONDITIONS OF USE ARE BEYOND OUR CONTROL, THE USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE INTENDED USE AND ASSUME ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH.

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	XXXX	DATE:	22-09-08
CHECKED BY:	XXXX	DATE:	22-09-08
APPROVED BY:	XXXX	DATE:	22-09-08

DRAWING TITLE:

Multi Color LED

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	MC24155	02P5950	XX
SCALE:	NTS	U.O.M.: INCHES [mm]	SHEET: 1 OF 1



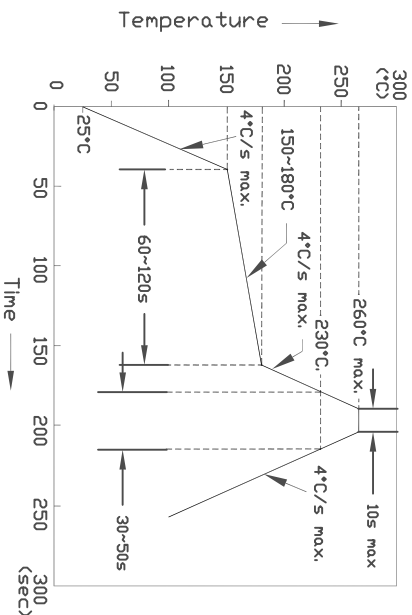
SPC TECHNOLOGY

ALL RIGHTS RESERVED. NO PORTION OF THIS PUBLICATION, WHETHER IN WHOLE OR IN PART CAN BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF SPC TECHNOLOGY.

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	19-09-08	XXXX	19-09-08	XXXX	19-09-08	
XXXX	XXXX		XXXX	19-09-08	XXXX	19-09-08	XXXX	19-09-08	

Reflow Temp/Time

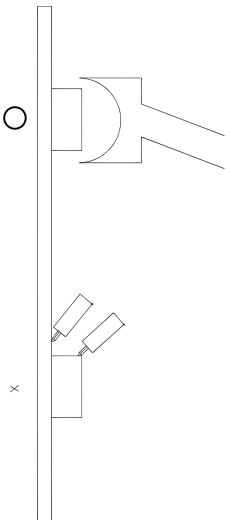


Soldering Iron

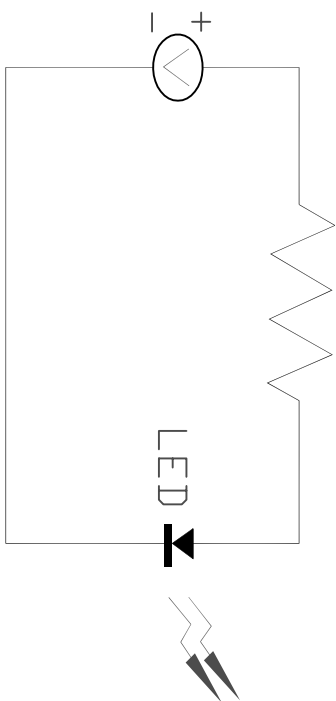
Basic Spec is ≤5sec when 260°C. If temperature is higher, time should be shorter (+10°C → -1sec). Power dissipation of iron should be smaller than 15W and temperature should be controllable. Surface temperature of the device should be under 230°C.

Rework

1. Customer must finish rework within 5 sec under 260°C.
2. The head of iron can not touch copper foil.
3. Tin-head type is preferred.



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% RH, Max.
- Temperature: 5°C-30°C (41°F-86°F)

2.2 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.

3. Baking

It is recommended to baking before soldering when the pack is unsealed after 72hrs. The Conditions are as followings:

- 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)



DISCLAIMER:

ALL STATEMENTS AND TECHNICAL INFORMATION CONTAINED HEREIN ARE BASED UPON INFORMATION AND/OR TESTS WE BELIEVE TO BE ACCURATE AND RELIABLE. SINCE CONDITIONS OF USE ARE BEYOND OUR CONTROL, THE USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR THE INTENDED USE AND ASSUME ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH.

TOLERANCES:

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.

DRAWN BY:	XXXX	DATE:	19-09-08
CHECKED BY:	XXXX	DATE:	19-09-08
APPROVED BY:	XXXX	DATE:	19-09-08

DRAWING TITLE:		Multi Color LED	
SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	MC24155	02P5950	XX
SCALE:	NTS	U.D.M:	INCHES [mm]
		SHEET:	1 OF 1

