



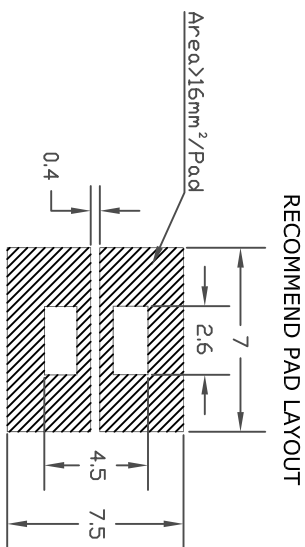
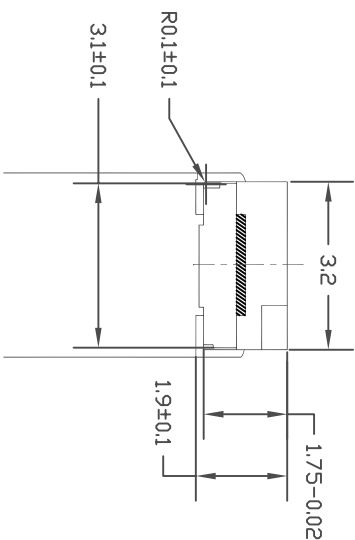
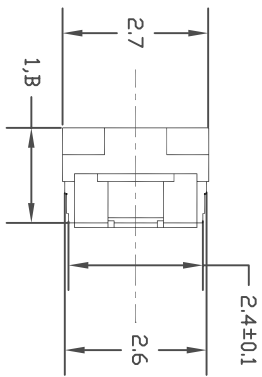
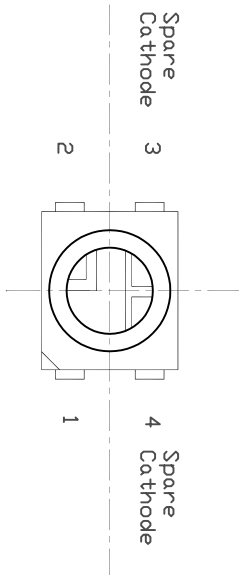
SPC
TECHNOLOGY

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

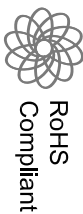
REVISIONS		DOC. NO.	DATE	CHECKED	DATE	APPROVED	DATE
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVI
XX	XX	XXXX	XXXX	20-09-08	XXXX	20-09-08	XXXX
XXXX	XXXX		XXXX	20-09-08	XXXX	20-09-08	XXXX

Package Outlines



ITEM	MATERIALS
Resin	Epoxy
Bonding Wire	φ25μAu
Lens color	Yellow
Dice	GaN/SiC
Emitted color	White

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



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	20-09-08
CHECKED BY:	DATE:
XXXX	20-09-08
APPROVED BY:	DATE:
XXXX	20-09-08

DRAWING TITLE:

Multi-Color LED

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	MC24189	02P5968	XX
SCALE:	U.D.M.	INCHES	SHEET:
NTS		[mm]	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		DESCRIPTION		DOC. NO.	SPC-F005	Effective	7/8/02	DOC No	1398
DOP #	REV			DRAWN	DATE	CHECKD	DATE	APPRVI	DATE
XX	XX	XXXX		XXXX	20-09-08	XXXX	20-09-08	XXXX	20-09-08
XXXX	XXXX			XXXX	20-09-08	XXXX	20-09-08	XXXX	20-09-08

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	Max	
CIE Coordinates	If=20mA	X Y	0.2500 0.2241	-- --	0.3214 0.3700	--
Forward voltage	If=20mA	Vf	3.2	--	4.0	V
Luminous Intensity	If=20mA	Iv	500	--	1250	mcd
Viewing angle at 50% Iv	If=10mA	2θ1/2	--	--	120	Deg
Reverse current	Vr=5V	Ir	--	--	10	µA



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	20-09-08
CHECKED BY:	DATE:
XXXX	20-09-08
APPROVED BY:	DATE:
XXXX	20-09-08

DRAWING TITLE:

Multi-Color LED

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	MC24189	02P5968	XX
SCALE:	NTS	U.D.M:	INCHES [mm]
		SHEET:	1 OF 1



SPC
TECHNOLOGY

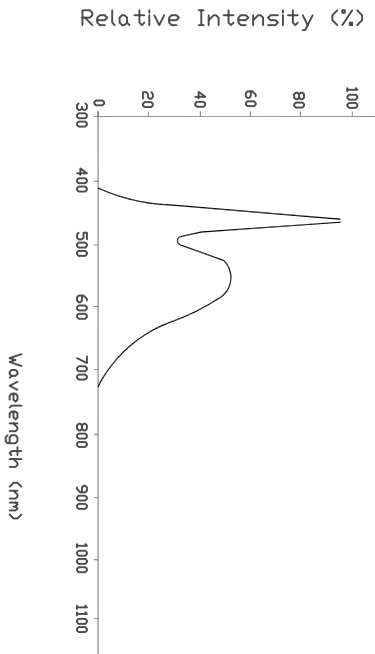
ALL RIGHTS RESERVED. NO PORTION OF THIS PUBLICATION, WHETHER IN WHOLE OR IN PART CAN BE REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF SPC TECHNOLOGY.

SPC-F005.DWG

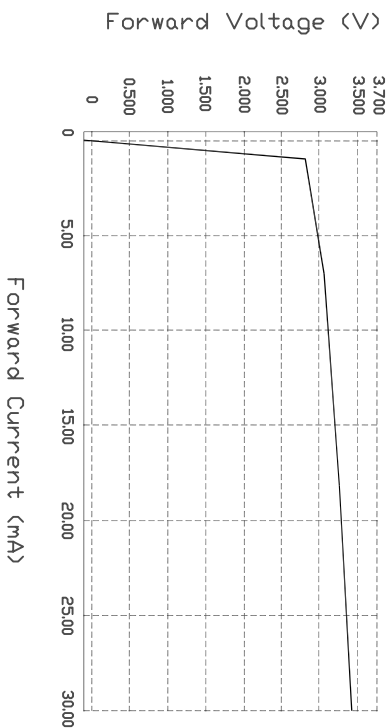
REVISIONS		DOC. NO. SPC-F005	Effective: 7/8/02		DCP No: 1398			
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRD	DATE
XX	XX	XXXX	XXXX	20-09-08	XXXX	20-09-08	XXXX	20-09-08
XXXX	XXXX		XXXX	20-09-08	XXXX	20-09-08	XXXX	20-09-08

OPTICAL CHARACTERISTIC CURVES

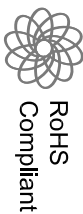
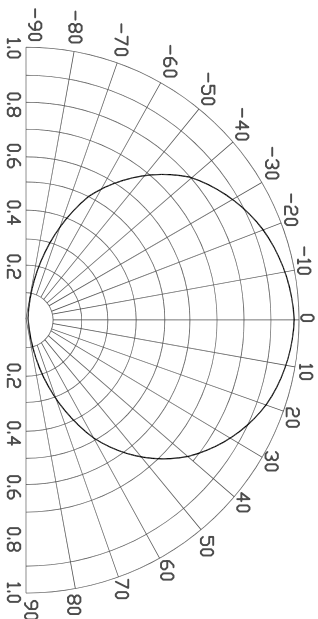
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage



Directive Characteristics



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	20-09-08
CHECKED BY:	DATE:
XXXX	20-09-08
APPROVED BY:	DATE:
XXXX	20-09-08

DRAWING TITLE:		Multi-Color LED	
SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	MC24189	02P5968	XX
SCALE:	NTS	U.O.M.: INCHES [mm]	SHEET: 1 OF 1



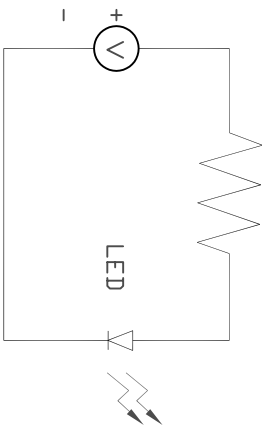
SPC TECHNOLOGY

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.

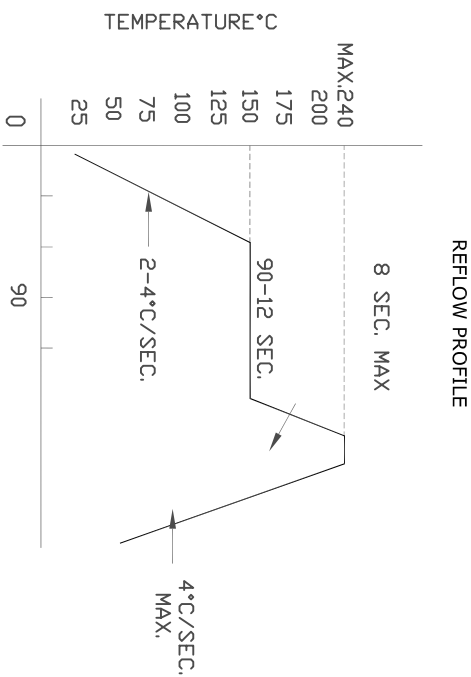
SPC-F005.DWG

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	20-09-08	XXXX	20-09-08	XXXX	20-09-08	
XXXX	XXXX		XXXX	20-09-08	XXXX	20-09-08	XXXX	20-09-08	

• Test circuit



• 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 temperatures should be controllable. Surface temperature of the device should be under 230°C.



• Handling Precautions

- 1. Over-current-proof
Customer must apply resistors 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 bags: 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 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

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	20-09-08
CHECKED BY:	DATE:
XXXX	20-09-08
APPROVED BY:	DATE:
XXXX	20-09-08

DRAWING TITLE:

Multi-Color LED

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	MC24189	02P5968	XX
SCALE:	U.D.M:	INCHES [mm]	SHEET:
NTS			1 OF 1



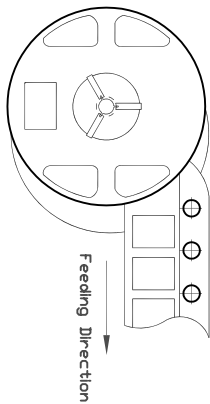
SPC
TECHNOLOGY

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

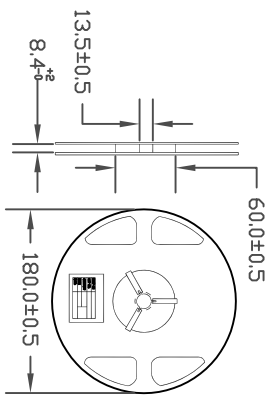
REVISIONS		DOC. NO.	SPC-F005	*	Effective	7/8/02	*	DCP No	1398
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVI	DATE	
XX	XX	XXXX	XXXX	20-09-08	XXXX	20-09-08	XXXX	20-09-08	
XXXX	XXXX		XXXX	20-09-08	XXXX	20-09-08	XXXX	20-09-08	

Single-Color High Performance SMD Top LEDs Packaging Specifications

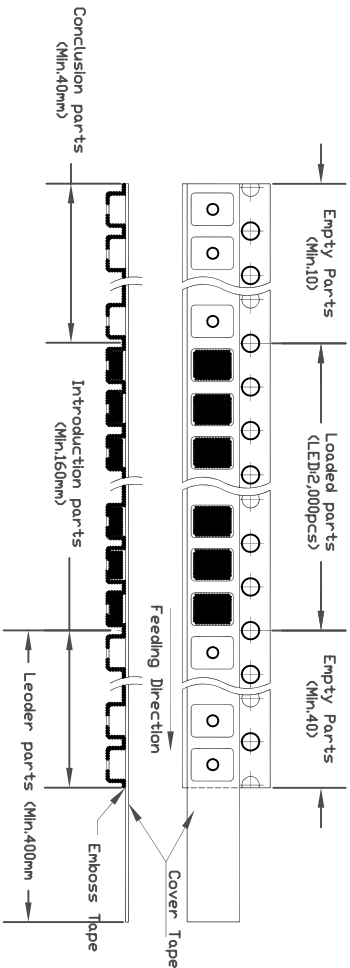
• Feeding Direction



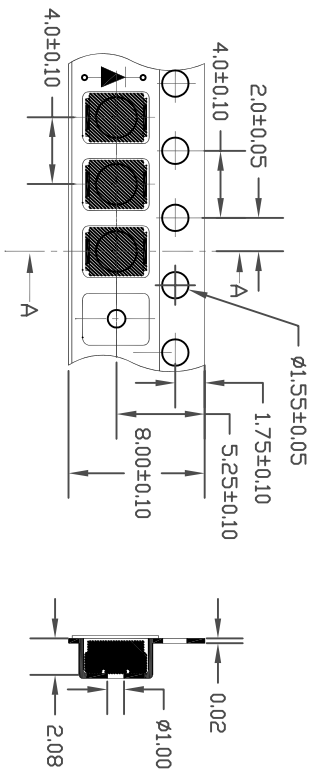
• Dimensions of Reel (Unit:mm)



• Arrangement of Tape



• Dimensions of Tape (Unit:mm)



- NOTES**
1. Empty component pockets are sealed with top cover tape
 2. The maximum number of missing lamps is two
 3. The cathode is oriented towards the tape sprocket hole in accordance with ANSI/EIA RS-481 specifications
 4. 2,000pcs/Reel



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	20-09-08
CHECKED BY:	DATE:
XXXX	20-09-08
APPROVED BY:	DATE:
XXXX	20-09-08

DRAWING TITLE:	
Multi-Color LED	
SIZE	DWG. NO.
A	MC24189
SCALE:	U.D.M.: INCHES [mm]
NTS	
ELECTRONIC FILE	REV
02P5968	XX
SHEET:	DF
1	1