



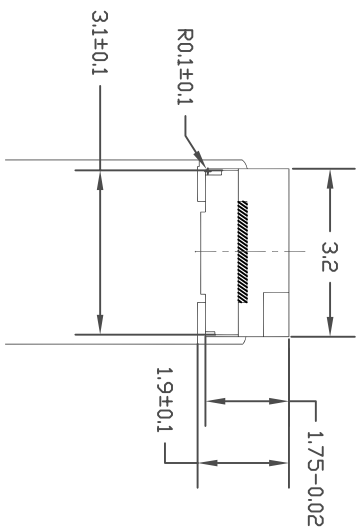
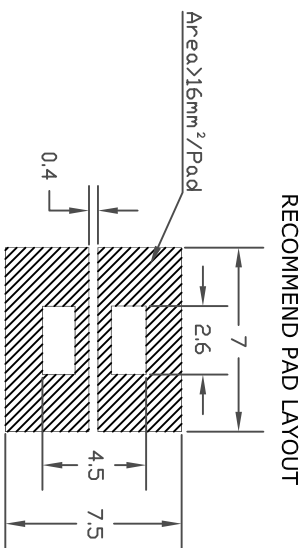
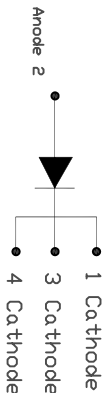
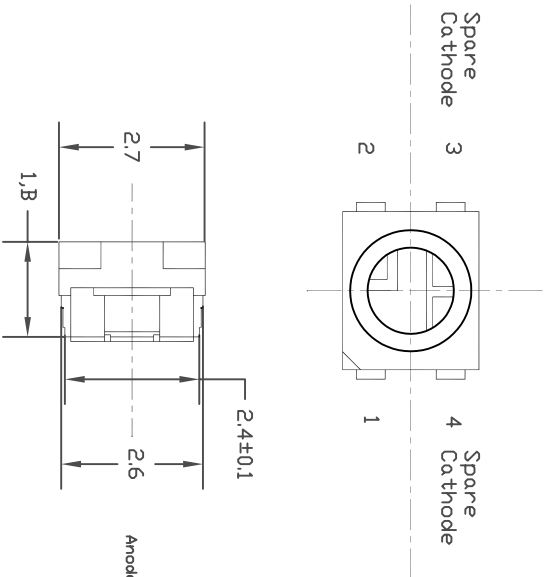
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SPC-F005.DWG

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	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

Package Outlines



ITEM	MATERIALS
Resin	Epoxy
Bonding Wire	φ25μmAu
Lens color	clear
Dice	AllnGaP
Emitted color	RED

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



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DRAWING TITLE:

Multi-Color LED

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	MC24187	02P5966	XX
SCALE:	NTS	U.D.M.: INCHES [mm]	SHEET: 1 OF 1



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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	90	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=30mA	λ_{peak}		625	nm	
Spectral half bandwidth	If=30mA	$\Delta\lambda$		20	nm	
Dominant wavelength	If=30mA	λ_{dom}		630	nm	
Forward voltage	If=20mA	Vf	--	1.9	2.4	V
Luminous intensity	If=20mA	Iv		450	800	mcd
Viewing angle at 50% Iv	If=10mA	$2\theta_{1/2}$	--	120	--	Deg
Reverse current	Vr=5V	Ir	--	--	10	μ A



RoHS
Compliant

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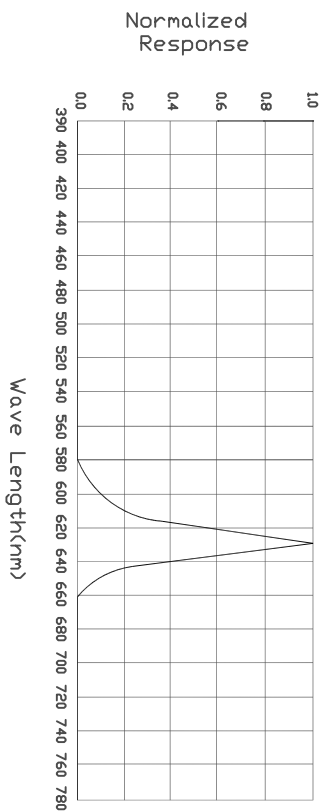
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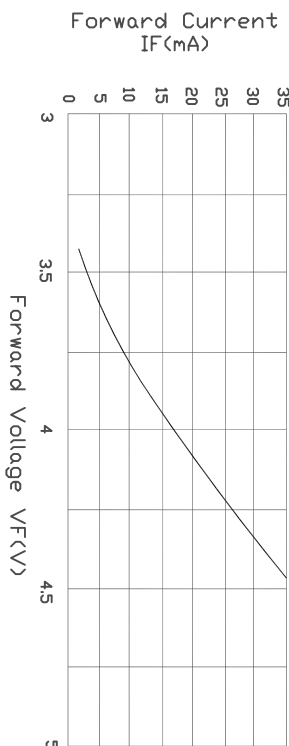
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OPTICAL CHARACTERISTIC CURVES

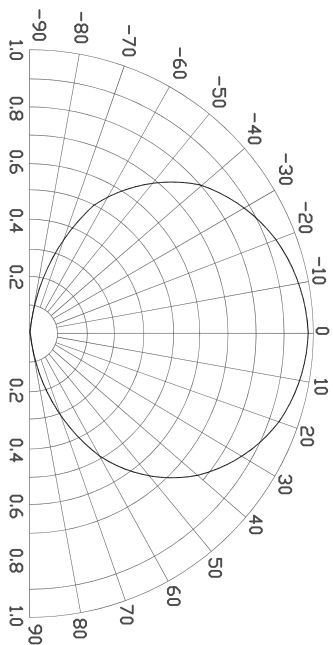
Spectral Radiance (Peak @ 630nm)



Forward Current vs Forward Voltage



Directive Characteristics



Multi-Color LED

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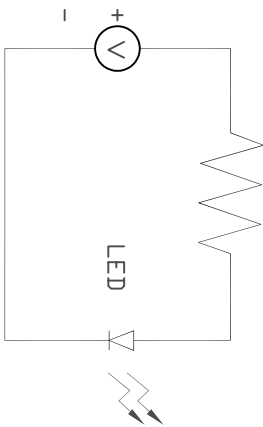
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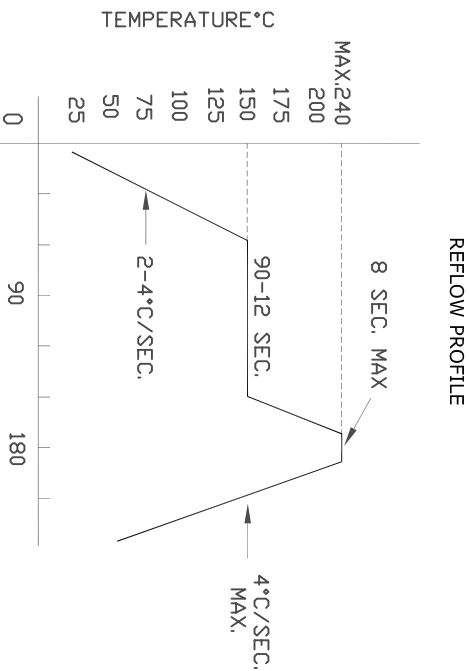
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• **Test Circuit**



• **Reflow Temp/Time**



• **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 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 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

• **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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U.D.M:	INCHES [mm]
SHEET:	1 OF 1
ELECTRONIC FILE	02P5966
REV	XX

Multi-Color LED



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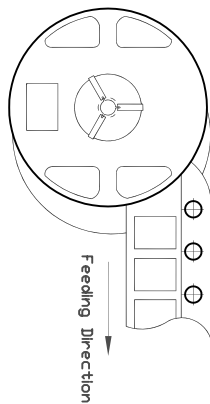
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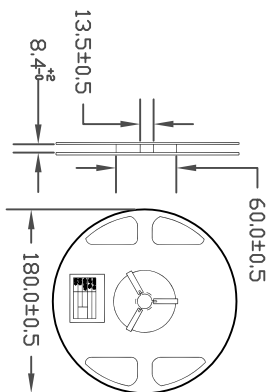
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Single-Color High Performance SMD Top LEDs Packaging Specifications

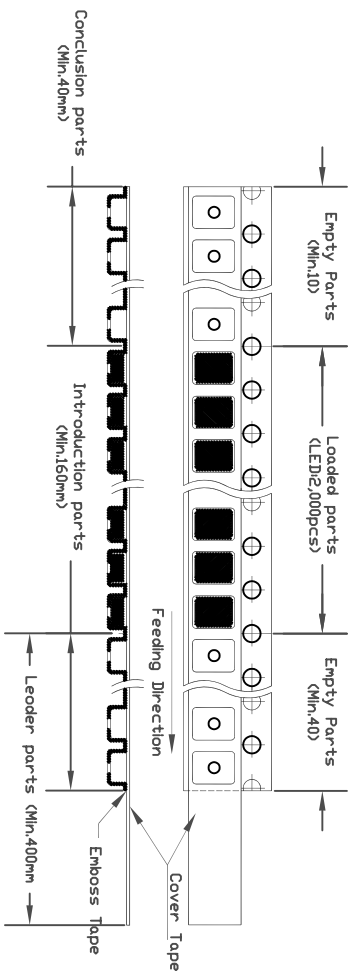
• Feeding Direction



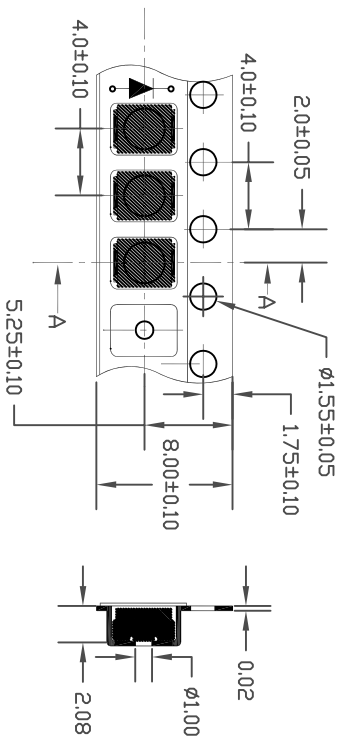
• Dimensions of Reel (Unit:mm)



• 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



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Compliant

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