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18-09-09	DATE	DOC. NO. SPC-F005
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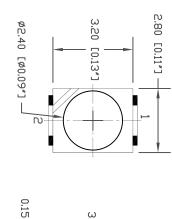
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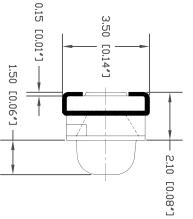
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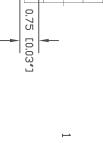
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Package Outlines







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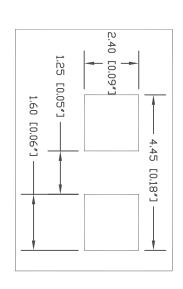


All dimensions are in millimeters (inches);
 Tolerances are ±0.2mm (0.08inch) unless otherwise noted.

Attention:

Observe Precautions For Handling Electrostatic Sensitive Devices







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U.O.M.: INCHES [mm]			MC24163		Multi — Color LED	
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Absolute Maximum Ratings

 $(TA=25^{\circ}C)$

Parameter	Symbol	Value	Unit
Forward current	If	30	mΑ
Reverse voltage	٧r	5	<
Power dissipation	Pd	75	3€
Operating temperature range	Тор	-20~+80	°C
Storage temperature range	Tstg	-40~+100	ċ
Peak pulsing current (1/8 duty f=1kHz)	Ifp	125	۳A

Electro-optical Characteristics

(TA=25°C)

Þ	10		-	٦I	Vr=5V	Reverse current
Deg		30		201/2	If=10mA	Viewing angle at 50% Iv
mcd	1	1	4100	Īv	*1 If=20mA	Luminous intensity *1
<	2.7	2.2		Vf	If=20mA	Forward voltage
ממ	595	590	583	λdom	If=20mA	Dominant wavelength
73		20	-	Δλ	If=20mA	Spectral half bandwidth
חשת		595		λpeαk	If=20mA	Wavelength at peak emission
Unit	Max	Тур	Min	Эүшрог	Condition	Parameter
		Value		Simbol	Test	

* 1 Note: Luminous intensity tolerances is ±10%



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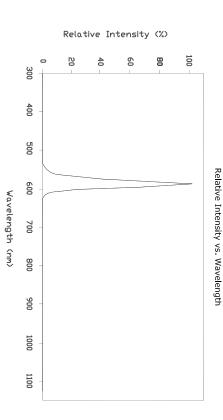
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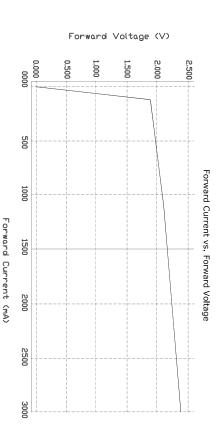
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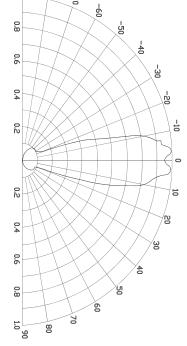
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OPTICAL CHARACTERSTIC CURVES





Directive Characteristics



-90 1.0

-80 -70



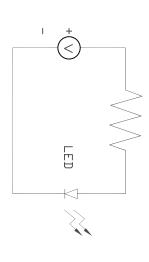
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Test Circuit



Handling Precautions

Over-current-proof

Customer must apply resistors for protection; otherwise slight voltage shift will cause big current change (Burn out will happen).

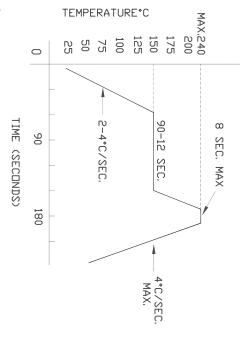
- 2.1 It is recommended to store the products in the following conditions: Humidity: 60% R.H. Max. Temperature : $5^{\circ}C \sim 30^{\circ}C$ ($41^{\circ}F \sim 86^{\circ}F$)
- 2.2 Shelf life in sealed bag: 12 month at $<5^\circ\text{C}{\sim}30^\circ\text{C}$ and <30% R.H. after the package is opened, the products should be used within a week or they should be keeping to stored at ≤ 20 R.H. with zip-lock sealed.

Baking

- It is recommended to baking before soldering when the pack is unsealed after 72hrs. The Conditions are as followings:
- 3.1 $60\pm3^{\circ}$ C x (12~24hrs) and <5%RH, taped reel type
- $3.2\ 100\pm3^{\circ}C \times (45\text{min}\sim1\text{hr})$, bulk type
- $3.3~130\pm3^{\circ}C~\times~(15~30$ min), bulk type

Reflow Temp/Time

REFLOW PROFILE



Basic spec is ≤ 5sec when 260°C. If temperature is higher, time

Soldering Iron

be smaller than 15W and temperatures should be controllable. Surface temperature of the device should be under 230°C. should be shorter (+10°C \rightarrow -1sec). Power dissipation of Iron should



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