

599 SERIES
MicroLED® SMD LED
Single-Color 0603
Low-Profile
1.60 x 0.80 x 0.4mm

MECHANICAL / SPECIFICATIONS

DIMENSIONS:
1.60 x 0.80 x 0.4mm

STANDARD PACKAGING:
4000 pcs on 7in. reel

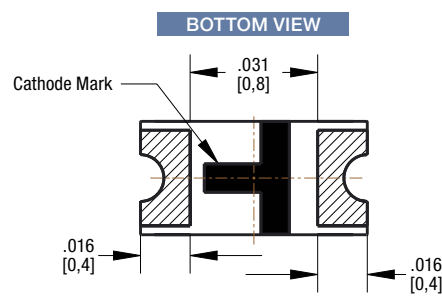
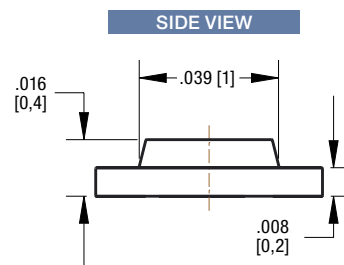
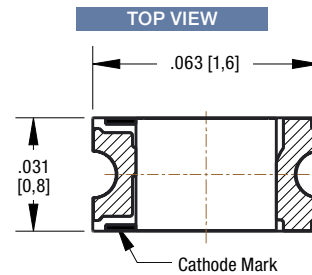
CERTIFICATIONS & RATINGS
ROHS Compliant

FEATURES & BENEFITS

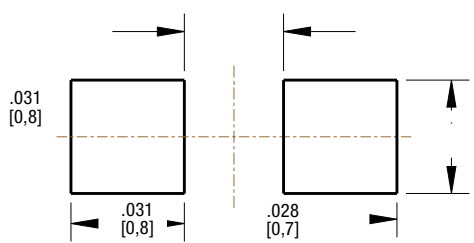
MOISTURE SENSITIVITY LEVEL: 2
Compatible with Automatic Placement Equipment

COUNTRY OF ORIGIN
Taiwan

DIMENSIONS inches [mm]





RECOMMENDED PAD LAYOUT



LED SCHEMATIC



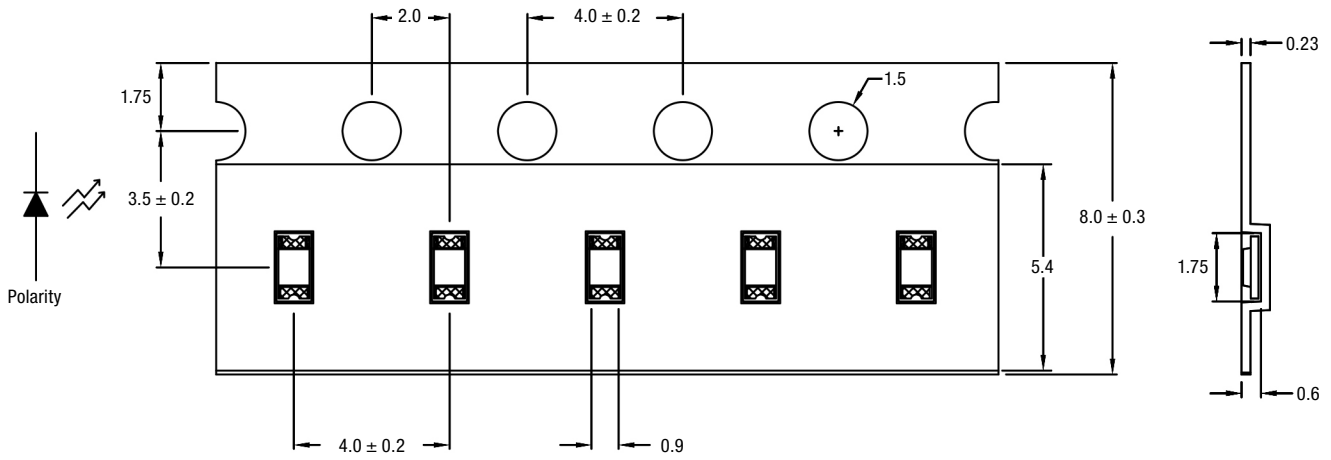
ELECTRICAL/OPTICAL CHARACTERISTICS AT 25°C AMBIENT

Part Number	Emitted Color	Material	Lens Color	Luminous Intensity (mcd)			Dominant Wavelength (nm)			Forward Voltage (V)			Viewing Angle (°deg.)	Reverse Current Intensity (µA)
				Min	Typ	Max	Min	Typ	Max	Min	Typ	Max		
				If=20mA										
 599-0010-137F	● Red	AllInGaP	Water Clear	50		200	624	630	636	1.9		2.5	130	10
599-0030-137F	● Orange	AllInGaP		50		320	600	605	615	1.7		2.6		10
599-0040-137F	● Yellow	AllInGaP		50		320	589	595	598	1.7		2.6		10
599-0060-137F	● Yellow-Green	AllInGaP		20		125	568	572	576	1.7		2.6		10
599-0080-137F	● Green	InGaN		200		1250	520	525	534	2.8		3.6		50
599-0090-137F	● Blue	InGaN		50		320	465	470	477	2.8		3.6		10
 599-2000-137F	○ White	InGaN	Yellow Diffused	200		1250	x=0.26 y=0.225	-	x=0.31 y=0.34	2.8		3.6	50	

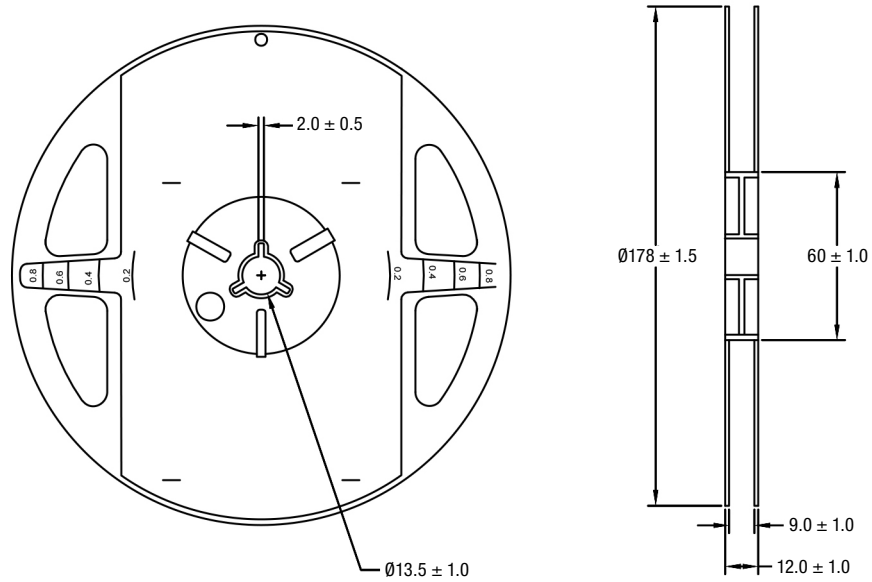
ABSOLUTE MAXIMUM RATINGS AT 25°C

LED Color	Power Dissipation (mW)	Forward Current (mA)	Reverse Voltage (V)	Peak Forward Current *(mA)	Operating Temperature (°C)	Storage Temperature (°C)
● Red	60	25	5	75	-40°C to +85°C	-40°C to +100°C
● Orange	65	25		60		
● Yellow	65	25		60		
● Yellow-Green	65	25		75		
● Green	72	20		100		
● Blue	72	20		100		
○ White	72	20		100		

TAPE AND REEL SPECIFICATION



Note: The tolerances unless mentioned is $\pm 0.1\text{mm}$, Angle ± 0.5 . Unit=mm

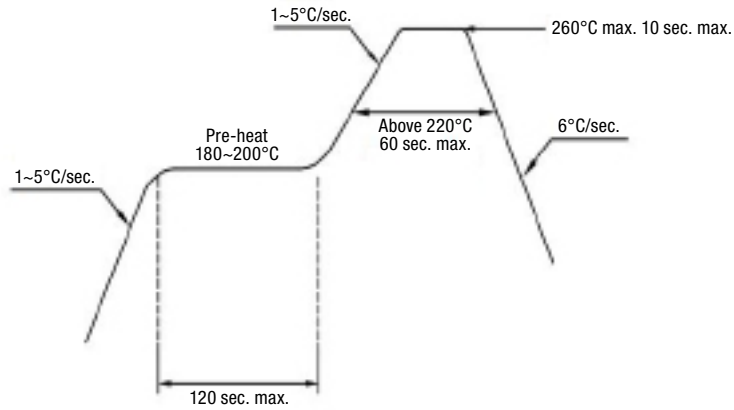


REFLOW SOLDERING

Recommend soldering paste specifications:

1. Operating temp.: Above 220°C ,60 sec. max.
2. Peak temp.:260°C Max.,10sec Max.
3. Reflow soldering should not be done more than two times.

REFLOW SOLDER PROFILE



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