

599 SERIES

MicroLED® SMD LED Single-Color 0402

1.0 x 0.5 x 0.35mm

MECHANICAL / SPECIFICATIONS

DIMENSIONS:
1.0 x 0.5 x 0.35mm

STANDARD PACKAGING:
4000 / Reel

CERTIFICATIONS & RATINGS

ROHS Compliant

FEATURES & BENEFITS

MOISTURE SENSITIVITY LEVEL: 2a

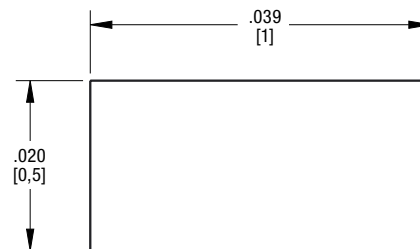
Compatible with Automatic Placement Equipment

COUNTRY OF ORIGIN

Taiwan

DIMENSIONS inches [mm]

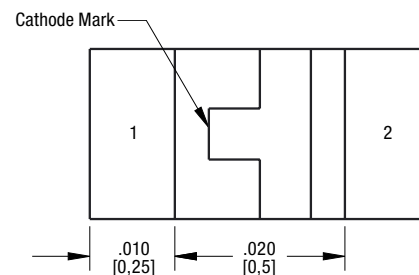
TOP VIEW



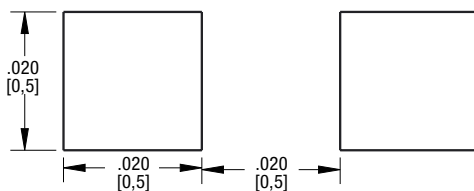
SIDE VIEW



BOTTOM VIEW



RECOMMENDED PAD LAYOUT



LED SCHEMATIC



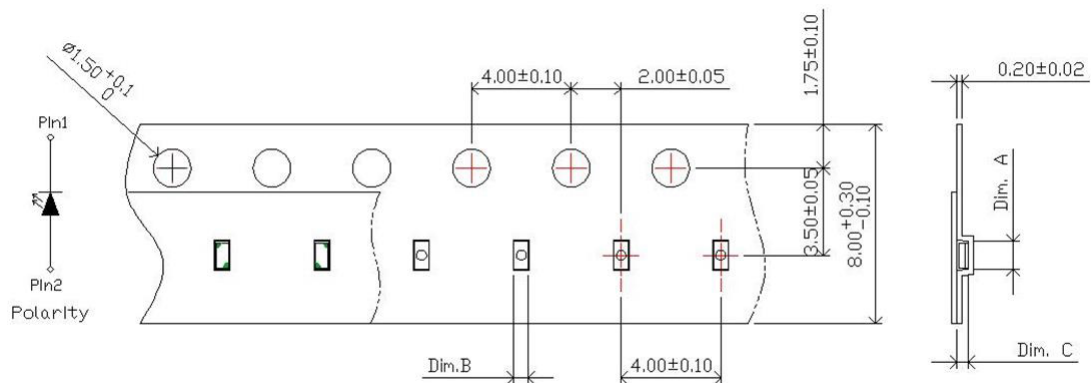
ELECTRICAL/OPTICAL CHARACTERISTICS AT 25°C

				Luminous Intensity (mcd)			Dominant Wavelength (nm)			Forward Voltage (V)			Viewing Angle (°deg.)	Reverse Current Intensity (μA)
				If=5mA										(Ir) VR=5V
Part Number	Emitted Color	Material	Lens Color	Min	Typ	Max	Min	Typ	Max	Min	Typ	Max		
599-1A10-147F	● Red	AlGaInP	Diffused	11	-	45	630	-	650	1.6	2.0	2.4	x=118/ y=160	10
599-1A30-147F	● Orange	AlGaInP	Diffused	11	-	72	600	-	612	1.6	2.0	2.4	x=118/ y=160	
599-1A40-147F	● Yellow	AlGaInP	Diffused	7	-	45	585	-	590	1.6	2.0	2.4	x=118/ y=160	
599-1A60-147F	● Yellow-Green	AlGaInP	Diffused	7	-	29	566	-	572	1.6	2.0	2.4	x=118/ y=160	
599-1A80-147F	● Green	InGaN	Diffused	180	-	360	520	-	535	2.35	2.8	3.05	x=100/ y=150	
599-1A90-147F	● Blue	InGaN	Diffused	18	-	113	460	-	480	2.55	2.8	3.15	x=118/ y=160	

ABSOLUTE MAXIMUM RATINGS AT 25°C

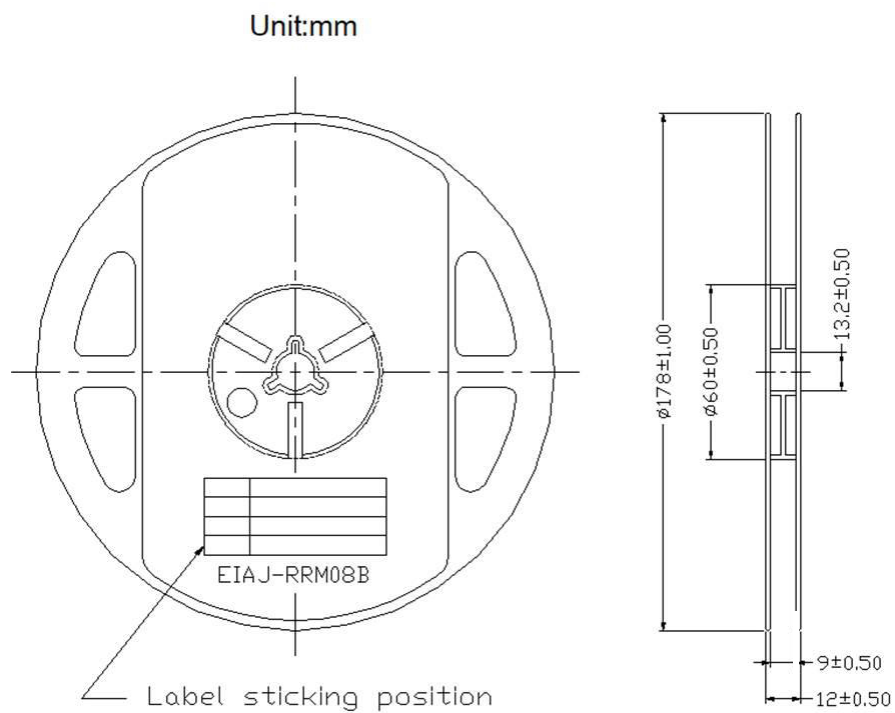
LED Color	Power Dissipation (mW)	Forward Current (mA)	Reverse Voltage (V)	Pulse Forward Current *(mA)	Operating Temperature (°C)	Storage Temperature (°C)
● Red	48	20	5	100	-40 to +85	-40 to +100
● Orange	48	20	5	100	-40 to +85	-40 to +100
● Yellow	48	20	5	100	-40 to +85	-40 to +100
● Yellow-Green	48	20	5	100	-40 to +85	-40 to +100
● Green	78	20	5	80	-40 to +85	-40 to +100
● Blue	63	20	5	80	-40 to +85	-40 to +100

TAPE AND REEL SPECIFICATION



Dim A	Dim B	Dim C	Quantity/Reel
1.15 ± 0.03	0.58 ± 0.03	0.45 ± 0.03	4K

Unit: mm

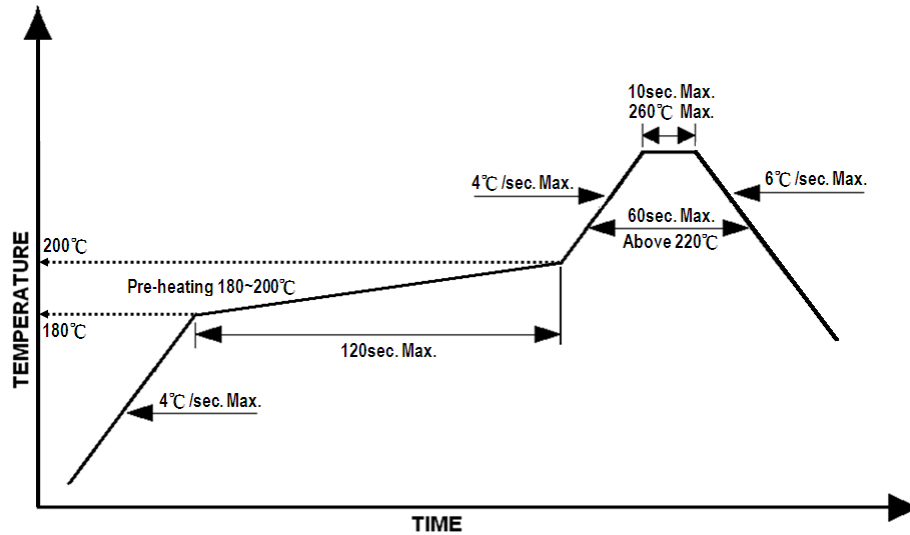


REFLOW SOLDERING

Recommend soldering paste specifications:

1. Operating temp.: Above 217°C ,60~150 sec.
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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