



599 SERIES
MicroLED® SMD LED
Single-Color 0603
Domed Lens
1.60 x 0.80 x 0.95mm

MECHANICAL / SPECIFICATIONS

DIMENSIONS:
1.60 x 0.80 x 0.95mm

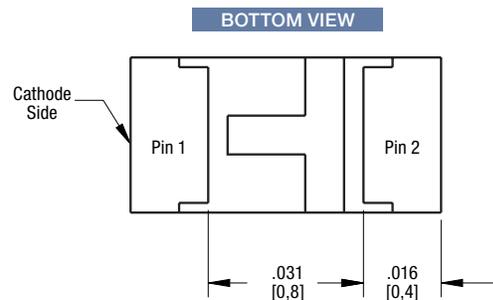
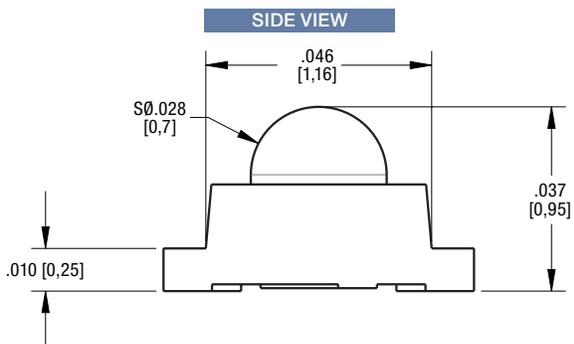
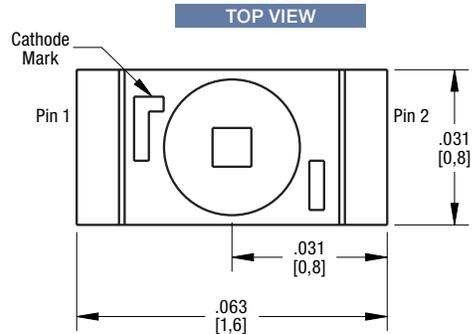
STANDARD PACKAGING:
4000 pcs / reel

CERTIFICATIONS & RATINGS
ROHS Compliant

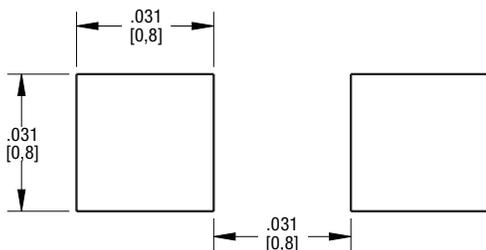
FEATURES & BENEFITS
MOISTURE SENSITIVITY LEVEL: 2a
Compatible with Automatic Placement Equipment

COUNTRY OF ORIGIN
Taiwan

DIMENSIONS inches [mm]



RECOMMENDED PAD LAYOUT



LED SCHEMATIC



ELECTRICAL/OPTICAL CHARACTERISTICS (T_{Soldering} 25°C)

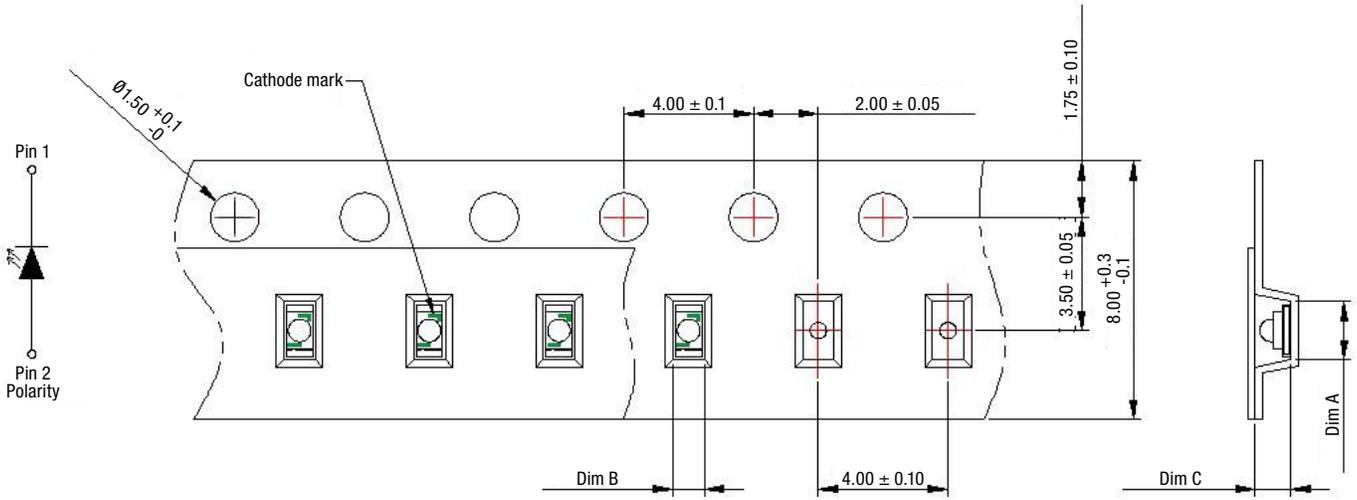
Part Number	Emitted Color	Material	Lens Color	Luminous Intensity (mcd)			Dominant Wavelength (nm)			Forward Voltage (V)			Viewing Angle (°deg.)	Reverse Current Intensity (μA)
				If=20mA										
				Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	(Ir) VR=5V	
599-0710-147F	● Red	AlInGaP	Clear	450	750	1440	615	622	635	1.6	2.0	2.4	55	100
599-0720-147F	● Red-Orange	AlInGaP	Clear	180	360	560	620	630	650	1.6	2.1	2.4	55	10
599-0740-147F	● Yellow	AlGaInP	Clear	360	450	900	585	589	595	1.6	2.0	2.4	55	10
599-0760-147F	● Yellow-Green	AlGaInP	Clear	45	180	285	567	571	580	1.6	2.1	2.4	55	10
599-0780-147F	● Green	InGaN	Clear	1440	2250	3600	515	522	535	2.7	3.2	3.9	35	10
599-0790-147F	● Blue	InGaN	Clear	285	520	900	460	470	476	2.7	3.2	3.9	35	10

ABSOLUTE MAXIMUM RATINGS (T_{Soldering} 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~+85	-40~+100
● Red-Orange	48	20	5	100	-40~+85	-40~+100
● Yellow	48	20	5	100	-40~+85	-40~+100
● Yellow-Green	48	20	5	100	-40~+85	-40~+100
● Green	78	20	5	80	-40~+85	-40~+100
● Blue	78	20	5	80	-40~+85	-40~+100

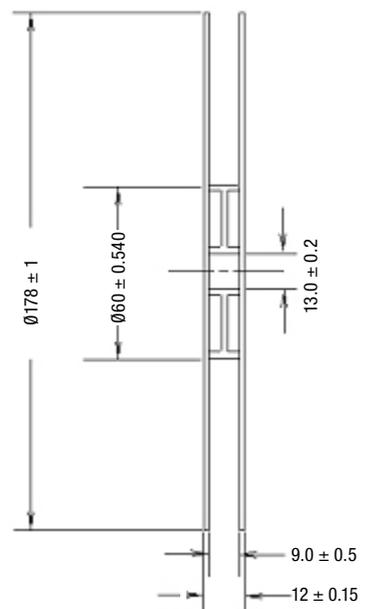
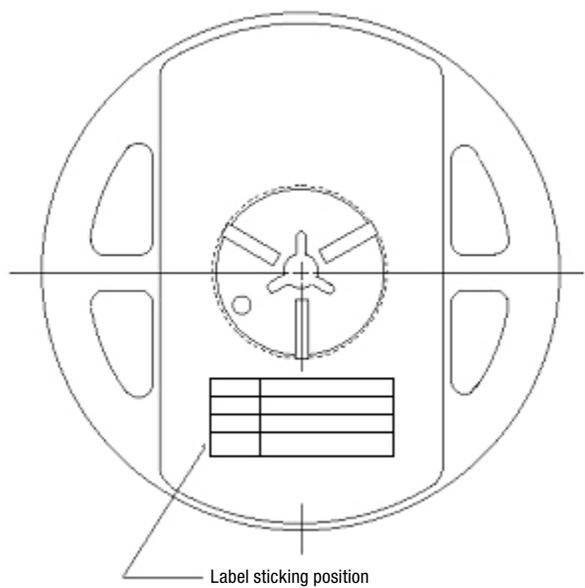
*Condition for IFP is pulse of 1/10 duty and 0.1msec width

TAPE AND REEL SPECIFICATION



Dim A	Dim B	Dim C	Quantity/Reel
1.76±0.05	0.9±0.05	0.90±0.05	4K

Unit: mm



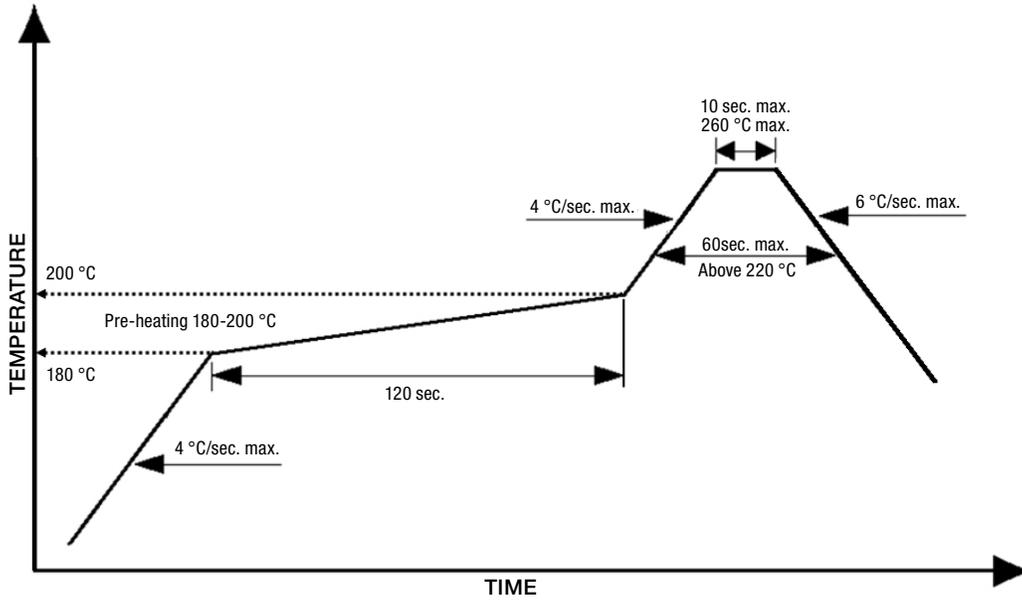
Unit: mm

REFLOW SOLDERING

Recommend soldering paste specifications:

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

REFLOW SOLDER PROFILE



Dialight reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.dialightsignalsandcomponents.com

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