



599 SERIES

MicroLED® SMD LED
Single-Color Side PLCC

2.80 x 1.20 x 0.80mm

MECHANICAL / SPECIFICATIONS

DIMENSIONS:
2.80 x 1.20 x 0.80mm

STANDARD PACKAGING:
2000 / reel

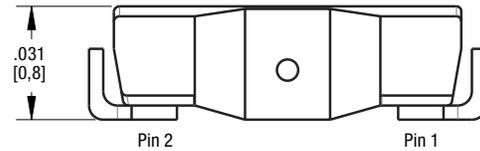
CERTIFICATIONS & RATINGS
ROHS Compliant

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

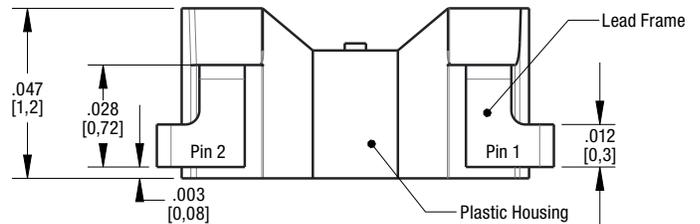
COUNTRY OF ORIGIN
Taiwan

DIMENSIONS inches [mm]

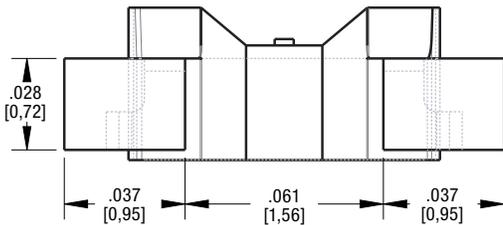
SIDE VIEW - BACK



TOP VIEW



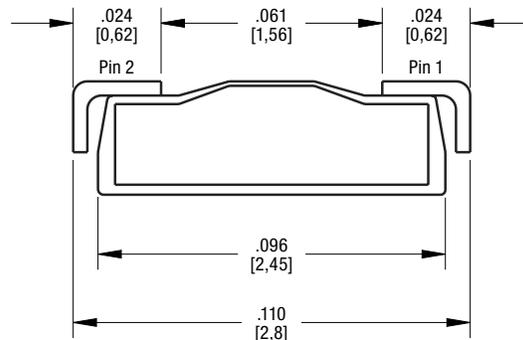
RECOMMENDED PAD LAYOUT



LED SCHEMATIC



SIDE VIEW - FRONT



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)
				Min	Typ	Max	Min	Typ	Max	Min	Typ	Max		
If=20mA														
599-0H90-147F	● Blue	InGaN	Clear	360	450	560	464	470	476	2.3	2.8	3.1	120	10
599-0H80-147F	● Green	InGaN	Clear	1800	2250	2850	515	525	530	2.5	2.9	3.1	120	
599-0H10-147F	● Red	AlGaInP	Clear	360	500	715	615	620	630	1.6	2.0	2.6	120	
599-2H00-147F	○ White	InGaN	Yellow Diffused	1440	1700	2385	*x=0.2800 y=0.2600			2.5	2.95	3.7	110	

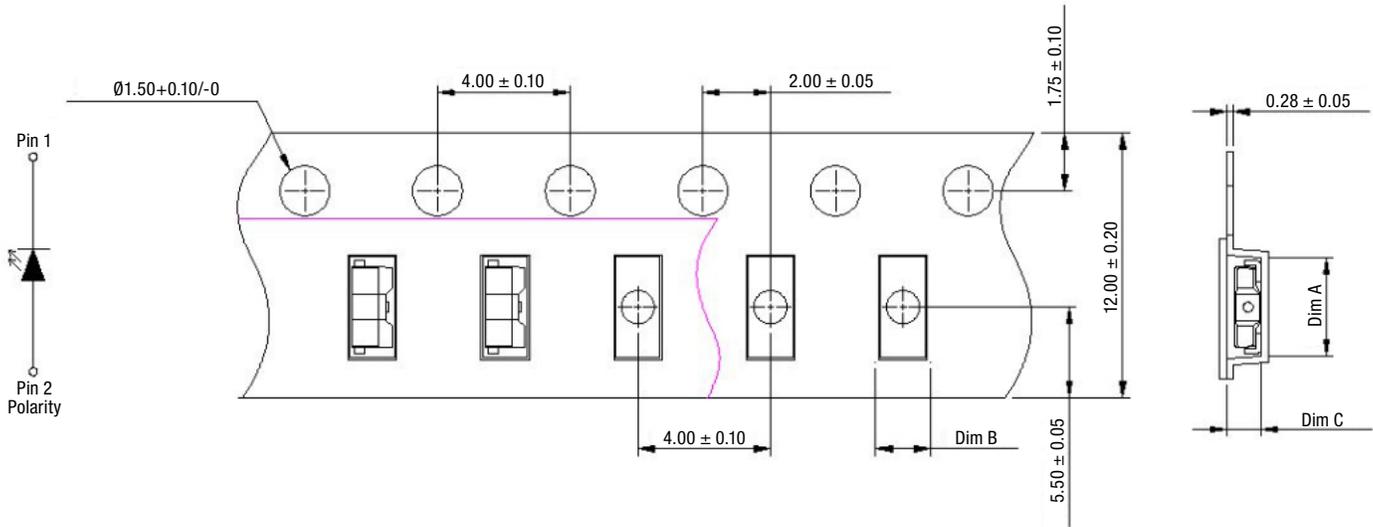
*Chromaticity Coordinates

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)
● Blue	60	20	5	80	-40~+85	-40~+100
● Green	62	20	5	80	-40~+85	-40~+100
● Red	52	20	5	100	-40~+85	-40~+100
○ White	68	20	5	30	-40~+85	-40~+100

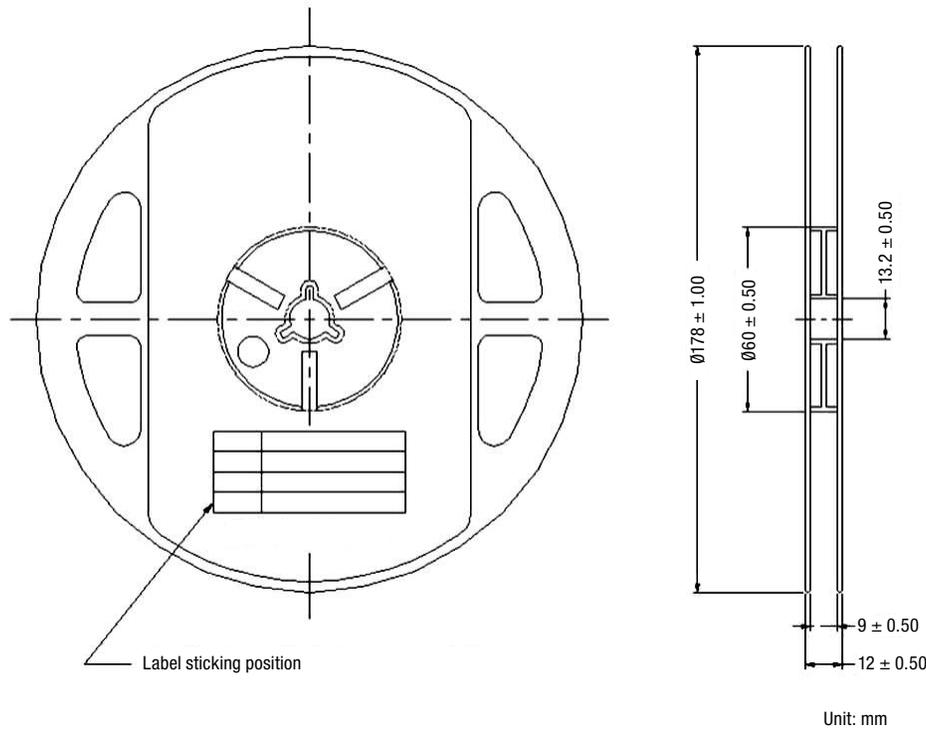
*Condition for IFP is pulse of 1/10 duty and 0.1msec width

TAPE AND REEL SPECIFICATION



Dim A	Dim B	Dim C	Quantity/Reel
3.05±0.05	1.35±0.05	0.95±0.05	2K

Unit: mm



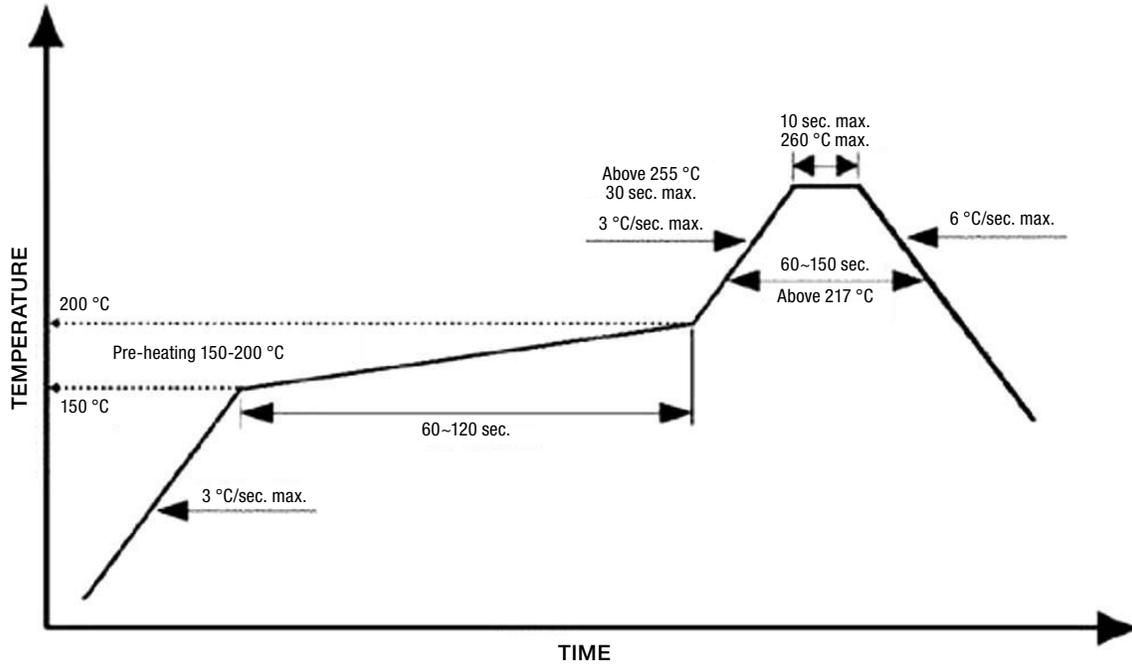
Unit: mm

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



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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