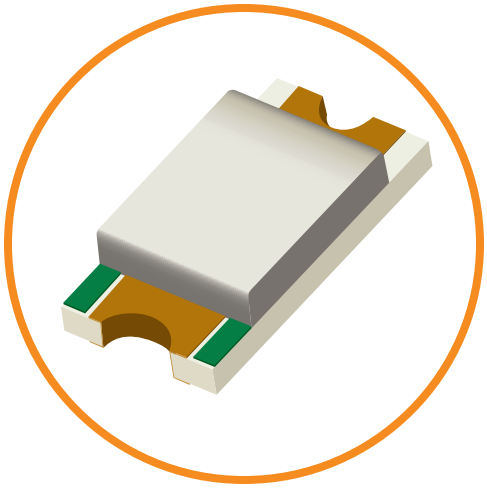
598 Series

MicroLED® SMD LED, Single Color 1206 Package

3.2 mm x 1.6 mm x 0.7 mm



Certifications & Ratings

- RoHS compliant

Features & Benefits

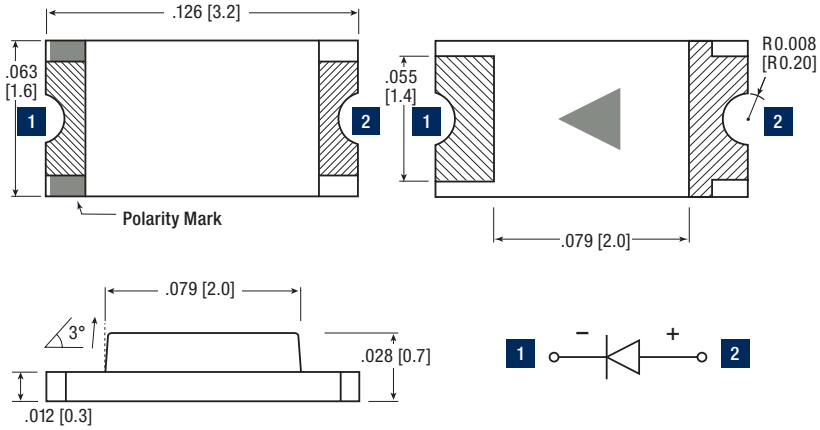
- Compatible with automatic placement equipment
- Packaged in 8 mm tape, 7" reel (4000 pcs/reel) and 20 per strip
- Meets EIA-481-1 pkg. std.

Dimensions

inches [mm]

Tolerance ±0.2 mm unless otherwise noted

Package



Part Number Guide

RoHS Compliant

5 9 8 - 8 2 X X - 1 0 X F

Color

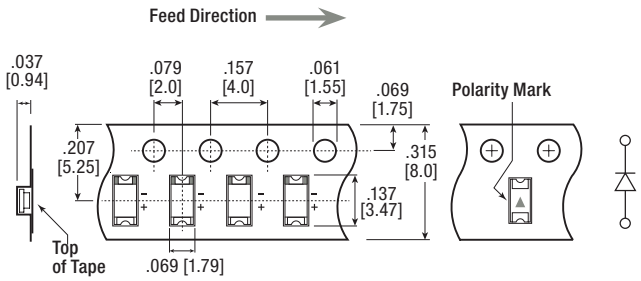
Red	1	0
Red-Orange	2	0
Orange	3	0
Yellow	4	0
Yellow	5	0
Yellow-Green	6	0
Green	7	0
Green	8	1
Blue	9	1

Packaging Option

2	20 pieces on tape
7	7" reel 4000 pcs/reel

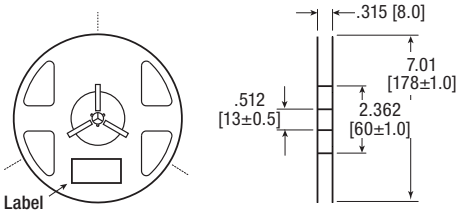
Tape

Tolerance ±0.1 mm unless otherwise noted

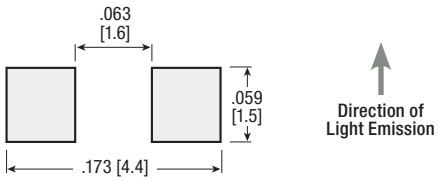


Reel

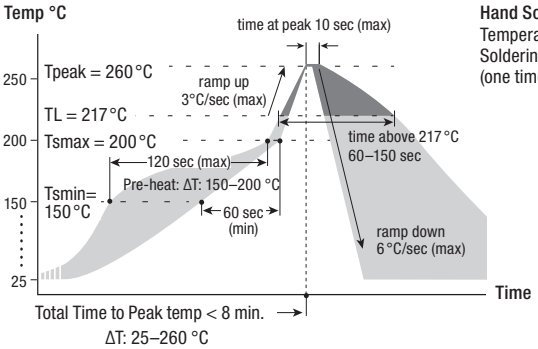
Tolerance ±0.1 mm unless otherwise noted



Soldering



Reflow Profile



Hand Soldering
Temperature: 300° C max.
Soldering time: 3 sec max. (one time only)

RoHS COMPLIANT

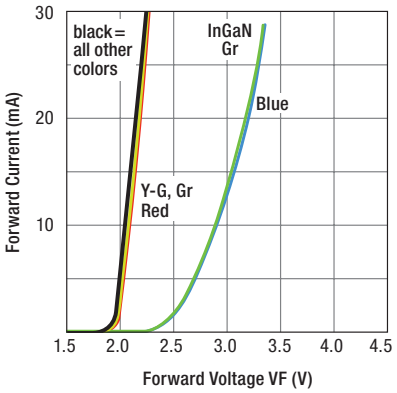
Electrical/Optical Characteristics

Dialight P/N		Emitted Color	Material	Lens Color	Luminous Intensity			Dominant Wavelength			Forward Voltage			Viewing Angle (°deg.)	Thermal Resistance (°C/W)	Reverse Current Intensity (µA)
					If = 20 ma										Rth(j-s) If=20 ma	(Ir) VR=5V
20-Piece Tape	7" Reel, 4000 pcs				Min	Typ	Max	Min	Typ	Max	Min	Typ	Max			
598-8210-102F	598-8210-107F	Red	AlInGaP	Non-Diffused	20	55	90	625	633	640	1.8	2.1	2.4	140	450	10
598-8220-102F	598-8220-107F	Red-Orange			70	120	200	620	625	630	1.8	2.1	2.4			
598-8230-102F	598-8230-107F	Orange			90	175	260	600	605	610	1.8	2.1	2.4			
598-8240-102F	598-8240-107F	Yellow			150	205	260	590	592	595	1.8	2.1	2.4			
598-8250-102F	598-8250-107F	Yellow			90	120	150	585	587	590	1.8	2.1	2.4			
598-8260-102F	598-8260-107F	Yellow-Green			43	70	100	570	572	575	1.8	2.1	2.4			
598-8270-102F	598-8270-107F	Green			18	30	43	562	566	570	1.8	2.1	2.4			
598-8281-102F	598-8281-107F	Green	InGaN		260	580	900	517	525	530	2.8	3.2	3.5			
598-8291-102F	598-8291-107F	Blue			90	175	260	465	470	475	2.8	3.2	3.5			

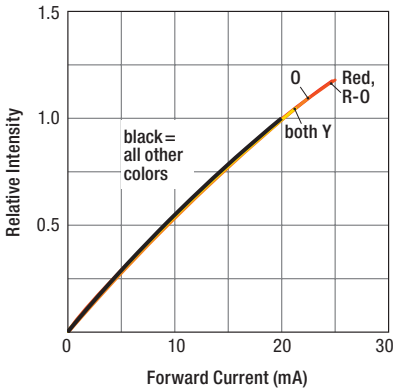
Absolute Maximum Ratings @ Ts = 25 °C

Power Dissipation (mW)	72	105	G - InGaN B
Forward Current (mA)	30		
Reverse Voltage (V)	5		
Operating Temp (°C)	-40 to +100		
Storage Temp (°C)	-40 to +100		
Peak Pulse Fw Current (mA)	60		
Electrostatic Discharge (HBM) (V)	2000	1000	G - InGaN B
Junction Temp (°C)	105		

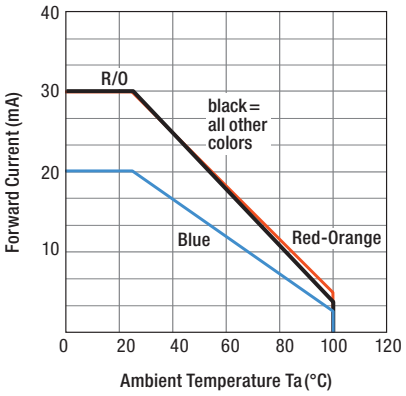
Forward Current vs. Forward Voltage (Ta=25 °C)



Relative Intensity vs. Forward Current (Ta=25 °C)



Maximum Forward Current vs. Ambient Temperature



Relative Intensity vs. Ambient Temperature

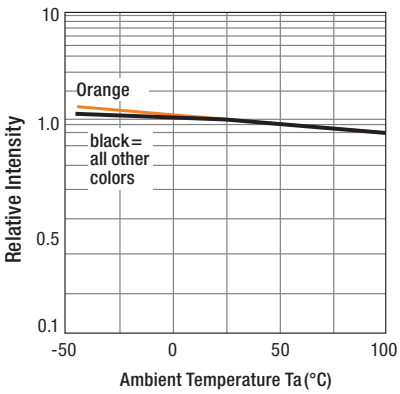
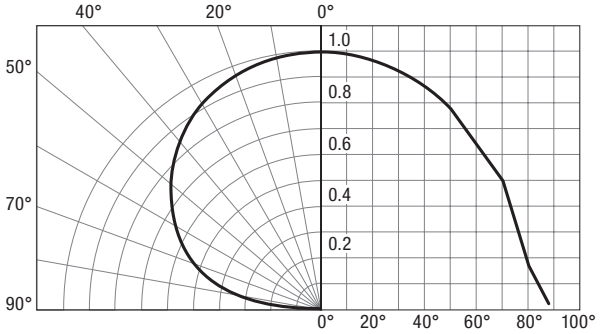


Diagram Characteristics of Radiation



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