

# Dialight

## Micro LED® SMD LED

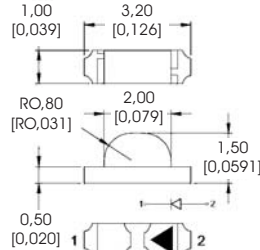
### “598 SERIES” 1208 PACKAGE (3.2mm X 1.5mm X 1.0mm) Single Color Right Angle



## FEATURES / BENEFITS

- ▲ Compatible with automatic placement equipment
- ▲ RoHS compliant
- ▲ Moisture sensitivity level 3
- ▲ Packaged in 8mm tape, 7” reel and 20 per strip
- ▲ Meets EIA-481-1 pkg. std.

### Package Outline Drawing:



Notes 1. All dimensions are in mm [inches];  
2. Tolerances are  $\pm 0.1\text{mm}$  [0.004inch] unless noted.

## ORDERING INFORMATION

5 9 8 - 8 3 1 0 - 1 1 7 F

Packaging Options

2	20 pieces on tape
7	7” reel 4,000pcs / reel

## PART NUMBERS

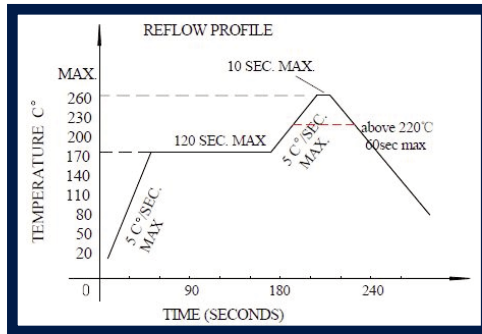
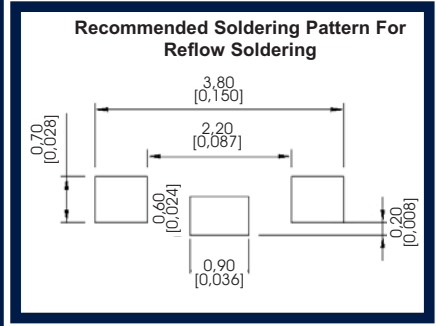
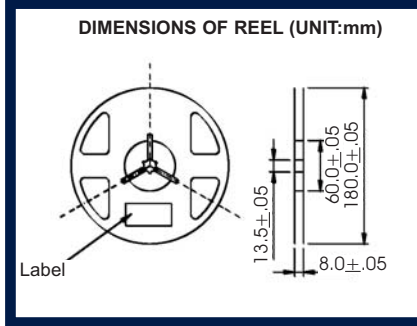
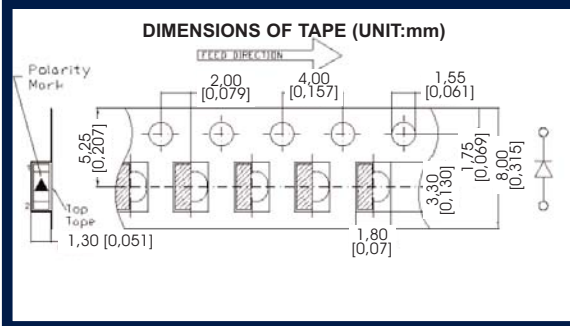
DIALIGHT P/N	EMITTED COLOR	MATERIAL	LENS COLOR	LUMINOUS INTENSITY			DOMINANT WAVE-LENGTH			FORWARD VOLTAGE			VIEWING ANGLE
				If = 20 mA			If = 20 mA			If = 20 mA			° DEGREES
				MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	
598-8310-117F	RED	AllnGaP	WATER CLEAR	43	-	70	630	635	640	1.8	2	2.4	160
598-8320-117F	RED-ORANGE	AllnGaP	WATER CLEAR	80	120	230	620	625	630	1.8	2	2.4	160
598-8330-117F	ORANGE	AllnGaP	WATER CLEAR	80	110	150	600	—	610	1.8	2	2.4	160
598-8340-117F	YELLOW	AllnGaP	WATER CLEAR	100	140	180	587	—	597	1.8	2	2.4	160
598-8350-117F	YELLOW	AllnGaP	WATER CLEAR	100	140	180	582	—	587	1.8	2	2.4	160
598-8360-117F	YELLOW-GREEN	AllnGaP	WATER CLEAR	43	54	100	570	—	575	1.8	2	2.4	160
598-8370-117F	GREEN	AllnGaP	WATER CLEAR	18	28	43	560	—	570	1.8	2	2.4	160
598-8380-117F	GREEN	InGaN	WATER CLEAR	350	480	650	515	520	525	2.8	3.2	3.4	160
598-8391-117F	BLUE	InGaN	WATER CLEAR	100	140	230	470	473	475	2.8	3.2	3.5	160

## ABSOLUTE RATINGS (@ Ta = 25°C)

DIALIGHT P/N	POWER DISSIPATION	FORWARD CURRENT	REVERSE VOLTAGE	OPERATING TEMPERATURE RANGE	STORAGE TEMPERATURE RANGE	PEAK PULSE FORWARD CURRENT	ELECTROSTATIC DISCHARGE
	(mW)	(mA)	(V)	(°C)	(°C)	(°C)	(HBM)
598-8310-117F	48	20	5	-40~+100	-40~+100	100	2000
598-8320-117F	48	20	5	-40~+100	-40~+100	100	2000
598-8330-117F	48	20	5	-40~+100	-40~+100	100	2000
598-8340-117F	50	20	5	-40~+100	-40~+100	100	2000
598-8350-117F	50	20	5	-40~+100	-40~+100	100	2000
598-8360-117F	48	20	5	-40~+100	-40~+100	100	2000
598-8370-117F	48	20	5	-40~+100	-40~+100	100	2000
598-8380-117F	68	20	5	-40~+100	-40~+100	100	1000
598-8391-117F	70	20	5	-40~+100	-40~+100	100	1000



### MECHANICAL DIMENSIONS

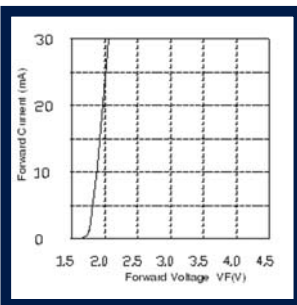


	REFLOW SOLDERING	HAND SOLDERING
Pre-heat	160~180°C	Temperature 300°C Max.
Pre-heat time	120 seconds Max.	
Peak temperature	260°C Max.	Soldering time 3 second Max (one time only)
Soldering time	10 seconds Max.	
Condition	Refer to temperature -profile	

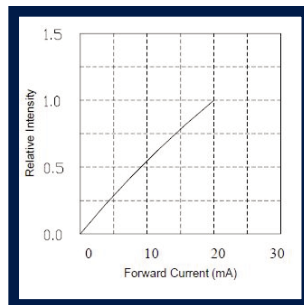
### OPTICAL AND ELECTRICAL CHARACTERISTICS CURVES

RED 630-642NM, RED-ORANGE 620-630NM, ORANGE 600-610NM, YELLOW 590-595NM, YELLOW 583-590NM, YELLOW GREEN 570-575NM, GREEN 562-570NM

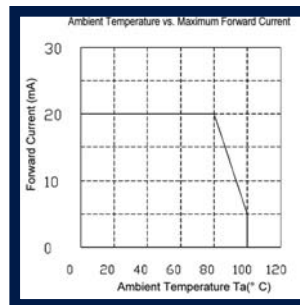
FORWARD VOLTAGE VS FORWARD CURRENT (Ta=25°C)



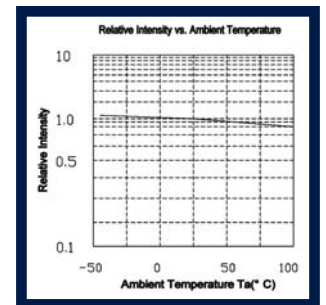
RELATIVE INTENSITY VS FORWARD CURRENT (Ta=25°C)



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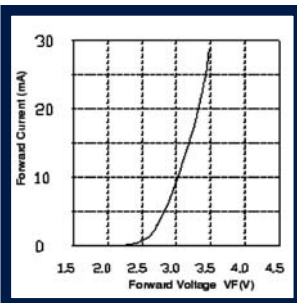


RELATIVE INTENSITY VS AMBIENT TEMPERATURE

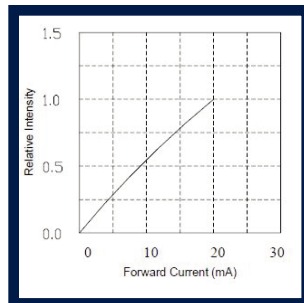


GREEN 515-525NM, BLUE 470-475NM

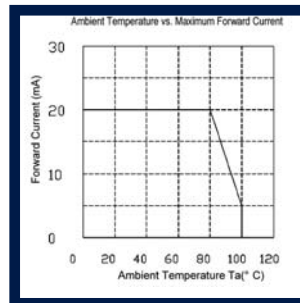
FORWARD VOLTAGE VS FORWARD CURRENT (Ta=25°C)



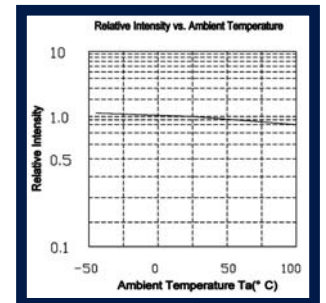
RELATIVE INTENSITY VS FORWARD CURRENT (Ta=25°C)



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RELATIVE INTENSITY VS AMBIENT TEMPERATURE



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