

Home > 5988310102F

Part Number: **5988310102F**


### General Description

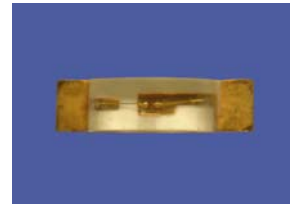
Lamp Type	Single Color
Lens Color	Non-Diffused
Compliance	EIA-481-1
Series	598
Configuration	1208(3.0MM X 2.1MM X 1.0MM)
Description	SMD LED 1208 PACKAGE, SINGLE COLOR
Package Options	Sample Strip

### Absolute Maximum Ratings (Ta = 25°)

Forward Current mA	25mA
Reverse Current	10 $\mu$ A@ Vr = 5V
Forward Current Pulsed	100mA
Derating	from 25°C = .33mA/°C
Solder Temperature	260° for 10 sec
Operating Temperature	-30~ +85
Storage Temperature	-40~ +100
ESD	2000

### Operating Characteristics

Color	 Red
LED Type	AllInGaP
Luminous Intensity Max	70
Forward Voltage Min	1.7
Dominant Wavelength Min	630nm
Dominant Wavelength Typical	635nm
Dominant Wavelength Max	640nm
Power Dissipation Max	60mW

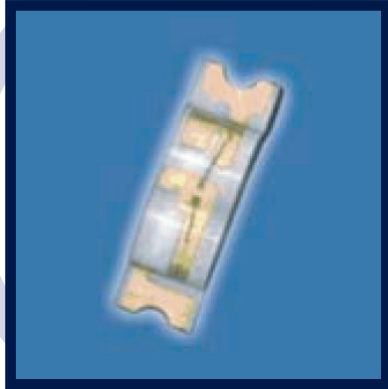


This is a  
RoHS Compliant Product  
[To learn more click here](#)

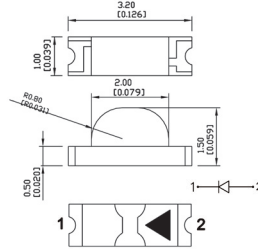
# Dialight

## Micro LED® SMD LED

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



Package Outline Drawing:



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

## FEATURES / BENEFITS

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

## ORDERING INFORMATION

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

Packaging Option

2	20 pieces on tape
7	7" reel 3000pcs / reel

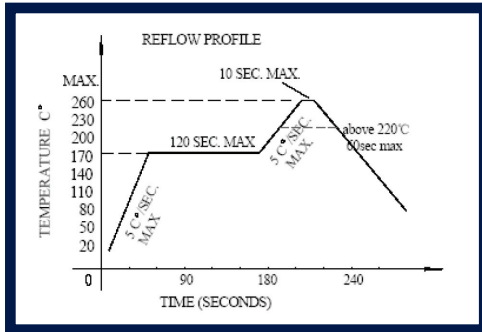
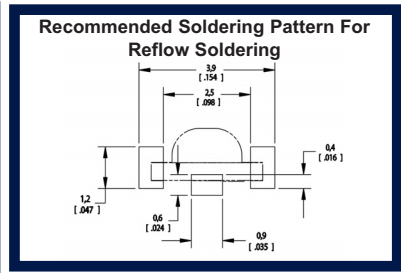
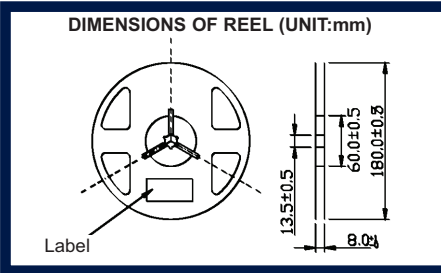
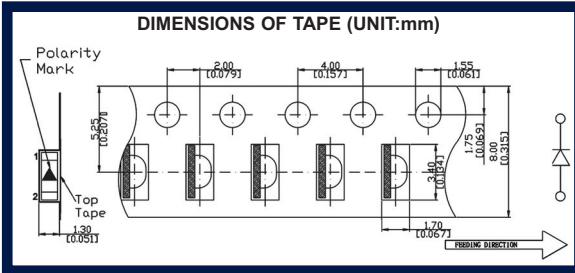
## PART NUMBERS

DIALIGHT P/N	EMITTED COLOR	MATERIAL	LENS COLOR	LUMINOUS INTENSITY			DOMINANT WAVELENGTH			FORWARD VOLTAGE			VIEWING ANGLE
				If = 20 ma			If = 20 ma			If = 20 ma			° DEGREES
				MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	
598-8310-107F	RED	AllnGaP	Water Clear	-	-	70	630	635	640	1.8	2	2.4	160
598-8320-107F	RED-ORANGE	AllnGaP	Water Clear	80	120	150	620	625	630	1.8	2	2.4	160
598-8330-107F	ORANGE	AllnGaP	Water Clear	90	110	150	600	-	610	1.8	2	2.4	160
598-8340-107F	YELLOW	AllnGaP	Water Clear	100	130	160	590	-	595	1.8	2	2.4	160
598-8350-107F	YELLOW	AllnGaP	Water Clear	100	130	160	583	-	590	1.8	2	2.4	160
598-8360-107F	YELLOW-GREEN	AllnGaP	Water Clear	30	50	60	570	-	575	1.8	2	2.4	160
598-8370-107F	GREEN	GaP	Water Clear	18	28	50	562	-	570	1.8	2	2.4	160
598-8380-107F	GREEN	InGaP	Water Clear	150	220	300	520	523	525	3	3.2	3.5	160
598-8391-107F	BLUE	InGaP	Water Clear	90	140	160	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)	(mA)	(HBM)
598-8310-107F	60	25	5	-40~+100	-40~+100	100	2000
598-8320-107F	60	25	5	-40~+100	-40~+100	100	2000
598-8330-107F	60	25	5	-40~+100	-40~+100	100	2000
598-8340-107F	55	25	5	-40~+100	-40~+100	100	2000
598-8350-107F	55	25	5	-40~+100	-40~+100	100	2000
598-8360-107F	60	25	5	-40~+100	-40~+100	100	2000
598-8370-107F	60	25	5	-40~+100	-40~+100	100	2000
598-8380-107F	87.5	25	5	-40~+100	-40~+100	100	1000
598-8391-107F	87.5	25	5	-40~+100	-40~+100	100	1000

### MECHANICAL DIMENSIONS

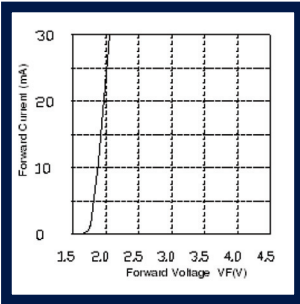


	REFLOW SOLDERING	HAND SOLDERING
Pre-heat	160~180°C	Temperature
Pre-heat time	120 seconds Max.	300°C Max.
Peak temperature	260°C Max.	Soldering time
Soldering time	10 seconds Max.	3 second Max (one time only)
Condition	Refer to temperature -profile	

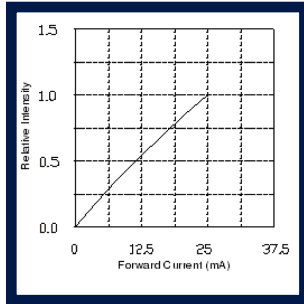
### OPTICAL AND ELECTRICAL CHARACTERISTICS CURVES

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

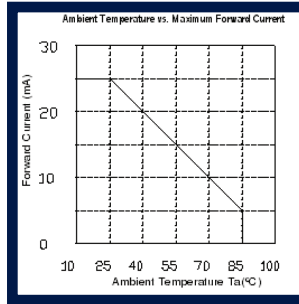
FORWARD VOLTAGE VS FORWARD CURRENT (Ta=25°C)



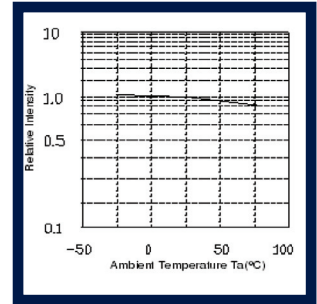
RELATIVE INTENSITY VS FORWARD CURRENT (Ta=25°C)



DERATING

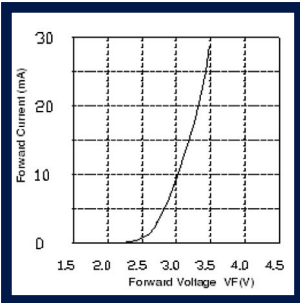


RELATIVE INTENSITY VS AMBIENT TEMPERATURE

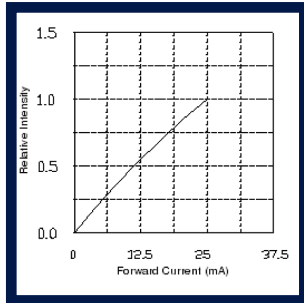


GREEN 520-525NM, BLUE 470-475NM

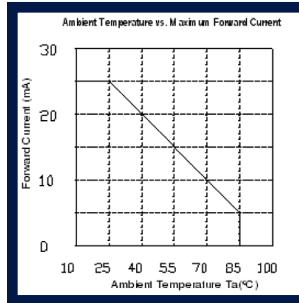
FORWARD VOLTAGE VS FORWARD CURRENT (Ta=25°C)



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



DERATING



RELATIVE INTENSITY VS AMBIENT TEMPERATURE

