

Home > 5989260107F

Part Number: **5989260107F**

### General Description

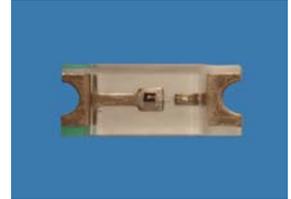
Lamp Type	Single Color
Lens Color	Non-Diffused
Compliance	EIA-481-1
Series	598
Configuration	1206(3.2MM X 1.4MM X 0.7MM)
Description	SMD LED 1206 PACKAGE, SINGLE COLOR
Package Options	Tape and Reel

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

Forward Current mA	30mA
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	-20~ +85
Storage Temperature	-30~ +100
ESD	2000

### Operating Characteristics

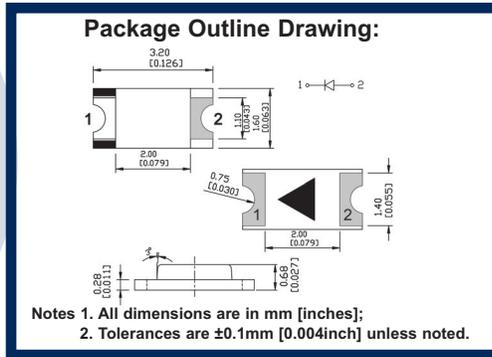
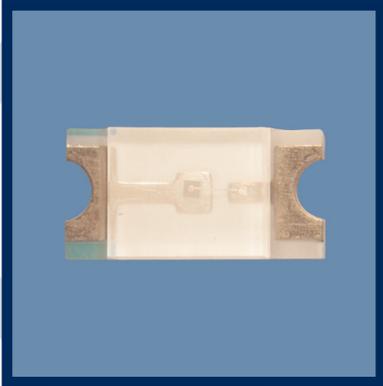
Color	 YellowGreen
LED Type	AllInGaP
Luminous Intensity Min	20
Luminous Intensity Typical	40
Luminous Intensity Max	60
Forward Voltage Min	1.8
Dominant Wavelength Min	570nm
Dominant Wavelength Max	575nm
Power Dissipation Max	72mW



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

# Dialight

## Micro LED® SMD LED “598 SERIES” 1206 PACKAGE (3.2mm X 1.6mm X 0.7mm) Single Color Diffused



- ### 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 - 9 2 1 0 - 1 0 <b>7</b> F	
Packaging Option	
2	20 pieces on tape
7	7" reel 3000pcs / reel

### PART NUMBERS

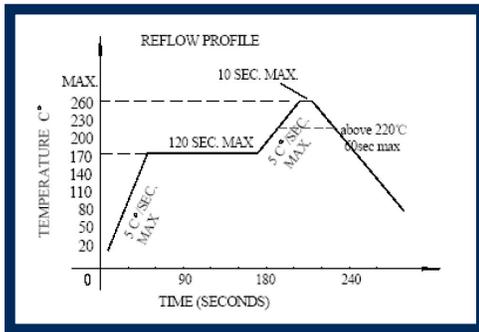
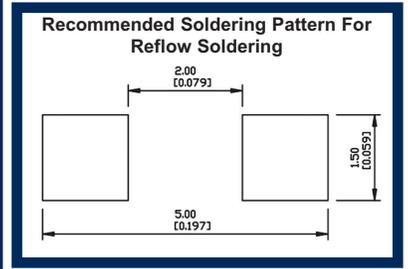
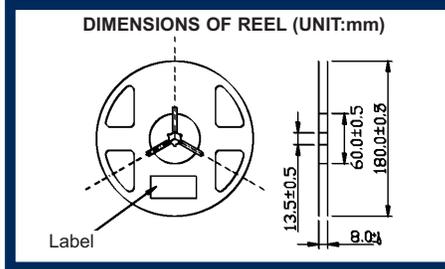
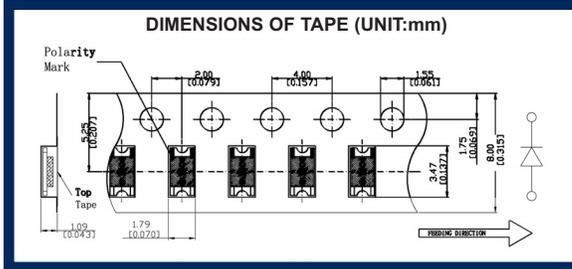
DIALIGHT P/N	EMITTED COLOR	MATERIAL	LENS COLOR	LUMINOUS INTENSITY If = 20 ma			DOMINANT WAVELENGTH If = 20 ma			FORWARD VOLTAGE If = 20 ma			VIEWING ANGLE ° DEGREES
				MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	
598-9210-107F	RED	AllnGaP	Diffused	30	-	80	630	635	640	1.7	2	2.4	140
598-9220-107F	RED-ORANGE	AllnGaP	Diffused	120	150	200	620	625	630	1.7	2	2.4	140
598-9230-107F	ORANGE	AllnGaP	Diffused	70	-	150	600	-	610	1.7	2	2.4	140
598-9250-107F	YELLOW	AllnGaP	Diffused	100	130	160	583	-	590	1.7	2	2.4	140
598-9260-107F	YELLOW-GREEN	AllnGaP	Diffused	20	40	60	570	-	575	1.8	2	2.4	140
598-9270-107F	GREEN	GaP	Diffused	10	20	40	562	-	570	1.8	2	2.4	140
598-9280-107F	GREEN	InGaN	Diffused	150	220	300	520	523	525	3	3.2	3.5	140
598-9281-107F	GREEN	InGaN	Diffused	220	300	400	520	523	525	3	3.2	3.5	140
598-9290-107F	BLUE	InGaN	Diffused	60	90	140	470	473	475	2.8	3.2	3.5	140
598-9291-107F	BLUE	InGaN	Diffused	90	140	160	470	473	475	2.8	3.2	3.5	140

### 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)
598-9210-107F	60	25	5	-30~+85	-40~+100	100	2000
598-9220-107F	60	25	5	-30~+85	-40~+100	100	2000
598-9230-107F	60	25	5	-30~+100	-40~+100	100	2000
598-9250-107F	55	25	5	-30~+85	-40~+100	100	1000
598-9260-107F	72	30	5	-20~+85	-30~+100	100	2000
598-9270-107F	60	25	5	-30~+85	-40~+100	100	1000
598-9280-107F	87.5	25	5	-30~+85	-40~+100	100	1000
598-9281-107F	87.5	25	5	-30~+85	-40~+100	100	1000
598-9290-107F	87.5	25	5	-30~+85	-40~+100	100	1000
598-9291-107F	87.5	25	5	-30~+85	-40~+100	100	2000



### MECHANICAL DIMENSIONS

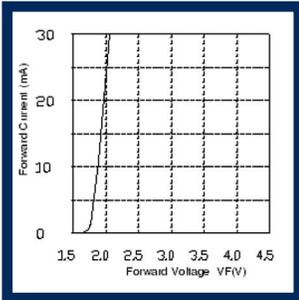


	REFLOW SOLDERING	HAND SOLDERING	
Pre-heat	160~180°C	Temperature	300°C Max.
Pre-heat time	120 seconds Max.		
Peak temperature	260°C Max.	Soldering time	3 second Max (one time only)
Soldering time	10 seconds Max.		
Condition	Refer to temperature profile		

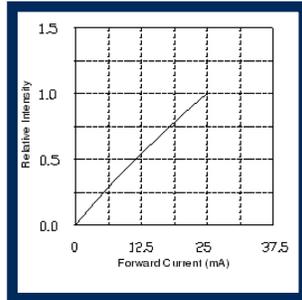
### OPTICAL AND ELECTRICAL CHARACTERISTICS CURVES

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

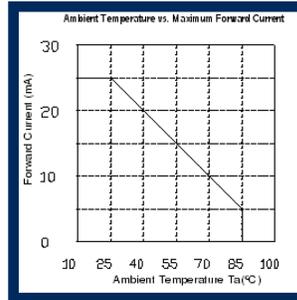
FORWARD VOLTAGE VS FORWARD CURRENT (Ta=25°C)



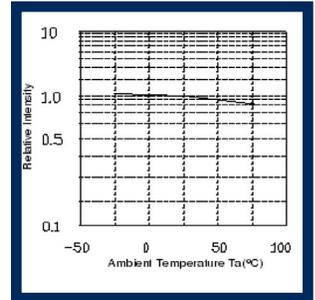
RELATIVE INTENSITY VS FORWARD CURRENT (Ta=25°C)



DERATING

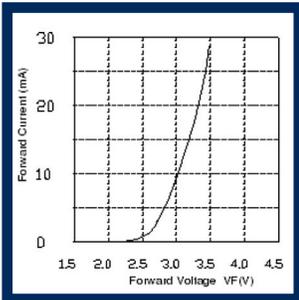


RELATIVE INTENSITY VS AMBIENT TEMPERATURE

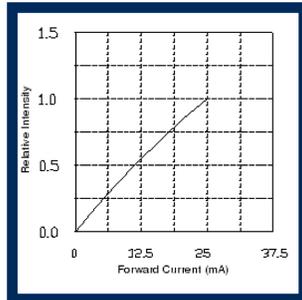


GREEN 520-525NM, BLUE 470-475NM

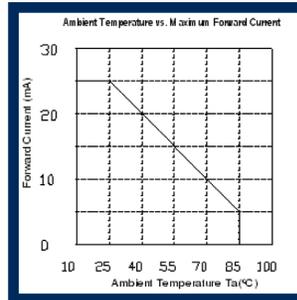
FORWARD VOLTAGE VS FORWARD CURRENT (Ta=25°C)



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



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RELATIVE INTENSITY VS AMBIENT TEMPERATURE

