

Home > 5988410202F

Part Number: **5988410202F**

**General Description**

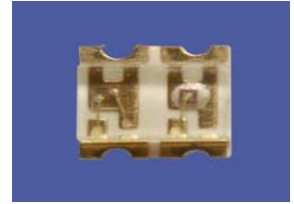
Lamp Type	Bi-Color
Lens Color	Non-Diffused
Compliance	EIA-481-1
Series	598
Configuration	0606(1.6MM X 1.6MM X 0.7MM)
Description	SMD LED 0606 PACKAGE, BI-COLOR
Package Options	Sample Strip

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

Forward Current mA	20mA
Reverse Current	10 $\mu$ A@ Vr = 5V
Forward Current Pulsed	100mA
Derating	from 25°C = .42mA/°C
Solder Temperature	260° for 10 sec
Operating Temperature	-40~ +100
Storage Temperature	-40~ +100
ESD	2000

**Operating Characteristics**

Color	Red	Green
LED Type	AlInGaP	AlInGaP
Luminous Intensity Min	40	30
Luminous Intensity Typical	60	40
Luminous Intensity Max	80	50
Forward Voltage Min	1.8	1.8
Dominant Wavelength Min	630nm	560nm
Dominant Wavelength Typical	635nm	565nm
Dominant Wavelength Max	645nm	570nm



This is a  
RoHS Compliant Product  
To learn more click here

Power Dissipation Max

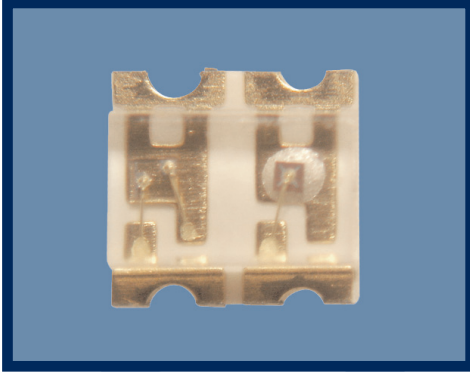
48mW

48mW

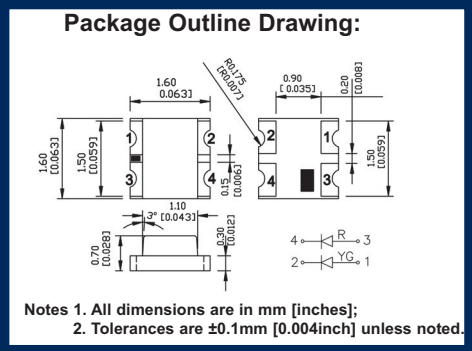


# Dialight

## Micro LED® SMD LED “598 SERIES” 0606 PACKAGE (1.6mm X 1.6mm X 0.7mm) Bi-Color



- ### 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 4 1 0 - 2 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 ° DEGREES	PINOUT
				MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX		
598-8410-207F	RED	AllnGaP	Water Clear	40	60	80	630	635	645	1.8	2	2.4	140	4 → R → 3 2 → G → 1
	GREEN	AllnGaP	Water Clear	30	40	50	560	565	570	1.8	2	2.4	140	4 → R → 3 2 → G → 1
598-8421-207F	RED-ORANGE	AllnGaP	Water Clear	80	100	120	620	625	630	1.8	2	2.4	140	4 → RO → 3 2 → G → 1
	GREEN	InGaN	Water Clear	200	220	240	520	525	530	2.7	3.2	3.5	140	4 → R → 3 2 → G → 1
598-8430-207F	ORANGE	AllnGaP	Water Clear	80	100	150	600	605	610	1.8	2	2.4	140	4 → O → 3 2 → G → 1
	GREEN	AllnGaP	Water Clear	30	40	50	562	568	570	1.8	2	2.4	140	4 → R → 3 2 → G → 1
598-8440-207F	YELLOW	AllnGaP	Water Clear	120	135	150	587	590	592	1.8	2	2.4	140	4 → Y → 3 2 → G → 1
	GREEN	AllnGaP	Water Clear	35	50	65	565	570	575	1.8	2	2.4	140	4 → R → 3 2 → G → 1
598-8450-207F	YELLOW	AllnGaP	Water Clear	80	120	150	587	590	592	1.8	2	2.4	140	4 → Y → 3 2 → G → 1
	GREEN	InGaN	Water Clear	90	120	140	525	528	530	2.7	3.2	3.5	140	4 → R → 3 2 → G → 1
598-8460-207F	YELLOW	AllnGaP	Water Clear	120	135	150	587	590	592	1.8	2	2.4	140	4 → Y → 3 2 → G → 1
	RED	AllnGaP	Water Clear	40	50	60	630	640	645	1.8	2.2	2.4	140	4 → R → 3 2 → Y → 1
598-8470-207F	RED	AllnGaP	Water Clear	20	40	60	627	635	639	1.8	2	2.4	140	SEE EXAMPLE
	YELLOW-GREEN	AllnGaP	Water Clear	20	30	40	565	570	575	1.8	2	2.4	140	SEE EXAMPLE
598-8480-207F	GREEN	InGaN	Water Clear	200	220	240	520	525	530	2.7	3.2	3.5	140	4 → R → 3 2 → G → 1
	BLUE	InGaN	Water Clear	60	75	90	470	473	475	2.8	3.2	3.4	140	4 → R → 3 2 → G → 1

### 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)
598-8410-207F	48	20	5	-40~+100	-40~+100	100	2000
	48	20	5	-40~+100	-40~+100	100	2000
598-8421-207F	48	20	5	-40~+100	-40~+100	100	2000
	70	20	5	-40~+100	-40~+100	100	2000
598-8430-207F	48	20	5	-40~+100	-40~+100	100	2000
	48	20	5	-40~+100	-40~+100	100	2000
598-8440-207F	72	20	5	-20~+85	-30~+100	100	1000
	72	20	5	-20~+85	-30~+100	100	1000
598-8450-207F	48	20	5	-40~+100	-40~+100	100	2000
	70	20	5	-40~+100	-40~+100	100	2000
598-8460-207F	72	20	5	-20~+85	-30~+100	100	1000
	72	20	5	-20~+85	-30~+100	100	1000
598-8470-207F	48	20	5	-40~+100	-40~+100	100	2000
	48	20	5	-40~+100	-40~+100	100	2000
598-8480-207F	102	20	5	-30~+85	-30~+100	100	1000
	105	20	5	-30~+85	-30~+100	100	1000



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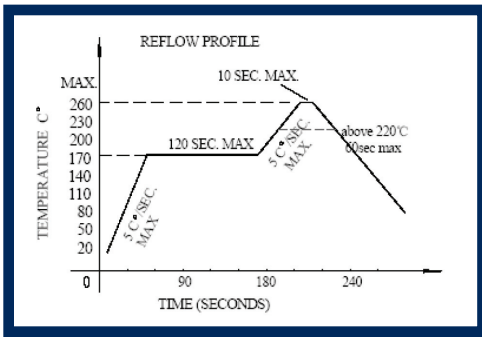
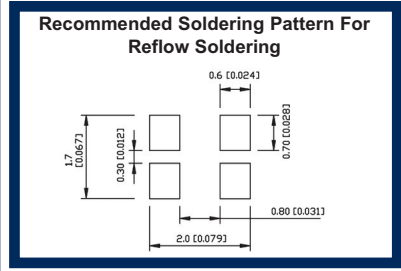
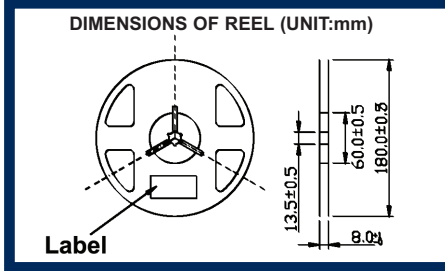
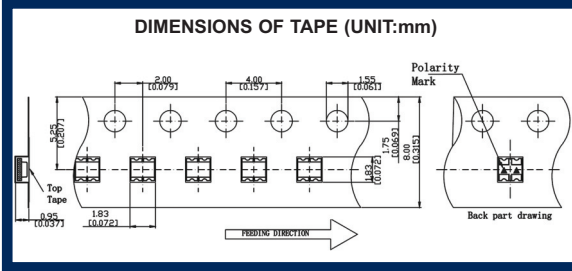


ISO 9001



Dialight Corporation

### MECHANICAL DIMENSIONS

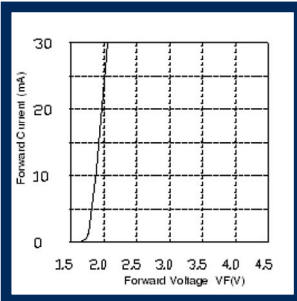


	REFLOW SOLDERING	HAND SOLDERING
Pre-heat	160~180°C	Temperature
Pre-heat time	120 seconds Max.	300°C Max.
Peak temperature	260°C Max.	Soldering time
Soldering time	10 seconds Max.	3 second Max (one time only)
Condition	Refer to temperature -profile	

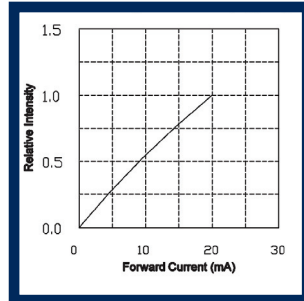
### OPTICAL AND ELECTRICAL CHARACTERISTICS CURVES

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

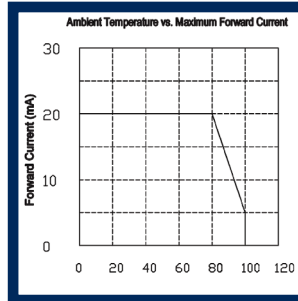
FORWARD VOLTAGE VS FORWARD CURRENT (Ta=25°C)



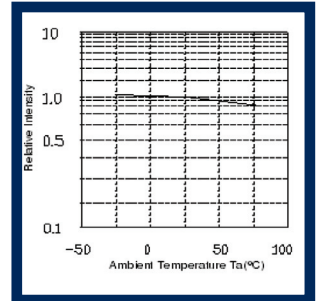
RELATIVE INTENSITY VS FORWARD CURRENT (Ta=25°C)



DERATING

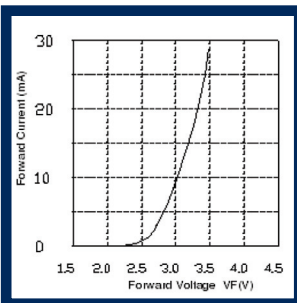


RELATIVE INTENSITY VS AMBIENT TEMPERATURE

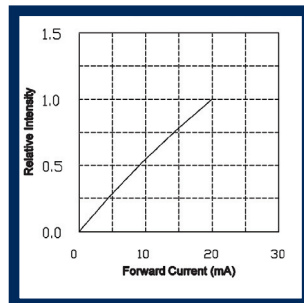


GREEN 520-525NM, BLUE 470-475NM

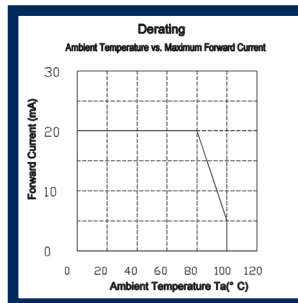
FORWARD VOLTAGE VS FORWARD CURRENT (Ta=25°C)



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



DERATING



RELATIVE INTENSITY VS AMBIENT TEMPERATURE

