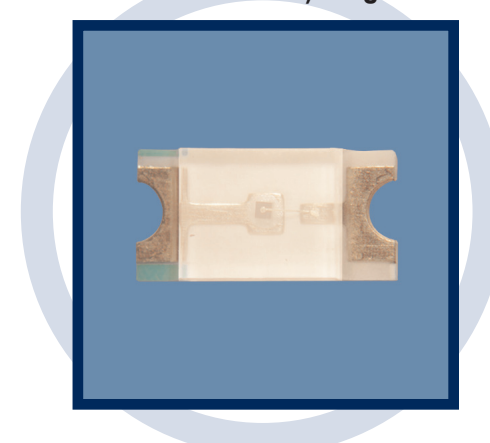




FEATURES / BENEFITS

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

Technical drawing of a mechanical part, showing two views: a front view (top) and a side view (bottom). The drawing includes dimensions in millimeters (mm) and inches (inches) in brackets.

Front View (Top):

- Overall width: 3.20 [0.126]
- Overall height: 1.10 [0.043]
- Left side features a semi-circular cutout with a radius of 0.20 [0.0079].
- Right side features a semi-circular cutout with a radius of 0.20 [0.0079].
- Internal features include a central rectangular hole with a width of 0.75 [0.030] and a depth of 0.45 [0.017].
- Dimensions for the internal features are 0.75 [0.030] and 0.45 [0.017].
- Feature callouts 1 and 2 are present.

Side View (Bottom):

- Overall width: 2.00 [0.079]
- Overall height: 1.40 [0.055]
- Left side features a semi-circular cutout with a radius of 0.20 [0.0079].
- Right side features a semi-circular cutout with a radius of 0.20 [0.0079].
- Internal features include a central rectangular hole with a width of 0.75 [0.030] and a depth of 0.45 [0.017].
- Dimensions for the internal features are 0.75 [0.030] and 0.45 [0.017].
- Feature callouts 1 and 2 are present.

Notes:

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

Technical drawing of a mechanical part, showing two views: a front view (top) and a side view (bottom). The drawing includes dimensions in millimeters (mm) and inches (inches) in brackets.

Front View (Top):

- Overall width: 3.20 [0.126]
- Overall height: 1.10 [0.043]
- Left side features a semi-circular cutout with a radius of 0.20 [0.0079].
- Right side features a semi-circular cutout with a radius of 0.20 [0.0079].
- Internal features include a central rectangular hole with a width of 0.75 [0.030] and a depth of 0.45 [0.0179].
- Dimensions for the internal features are 0.75 [0.030] and 0.45 [0.0179].
- Feature callouts 1 and 2 are present.

Side View (Bottom):

- Overall width: 2.80 [0.079]
- Overall height: 1.40 [0.055]
- Left side features a semi-circular cutout with a radius of 0.20 [0.0079].
- Right side features a semi-circular cutout with a radius of 0.20 [0.0079].
- Internal features include a central rectangular hole with a width of 0.75 [0.030] and a depth of 0.45 [0.0179].
- Dimensions for the internal features are 0.75 [0.030] and 0.45 [0.0179].
- Feature callouts 1 and 2 are present.

Notes:

- 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 - 9 2 1 0 - 1 0 **7** F
Packaging Option

5 9 8 - 9 2 1 0 - 1 0 **7** F
Packaging Option

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

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	
598-9210-107F	RED	AlInGaP	Diffused	30	-	80	630	635	640	1.7	2	2.4	140
598-9220-107F	RED-ORANGE	AlInGaP	Diffused	120	150	200	620	625	630	1.7	2	2.4	140
598-9230-107F	ORANGE	AlInGaP	Diffused	70	-	150	600	-	610	1.7	2	2.4	140
598-9250-107F	YELLOW	AlInGaP	Diffused	100	130	160	583	-	590	1.7	2	2.4	140
598-9260-107F	YELLOW-GREEN	AlInGaP	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 (@ T_a = 25°C)

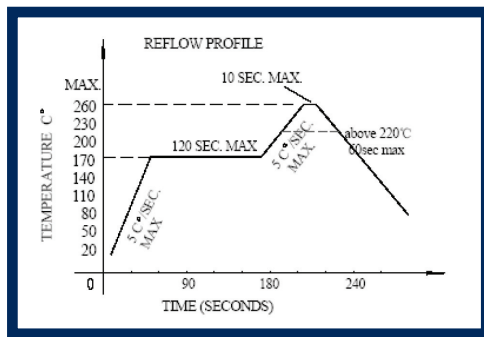
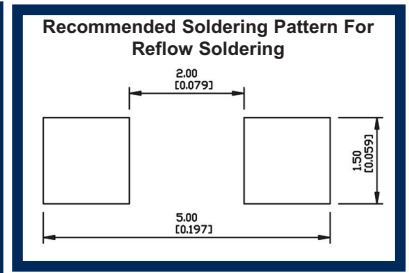
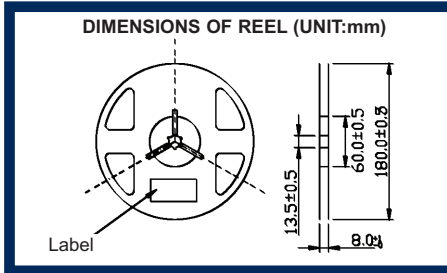
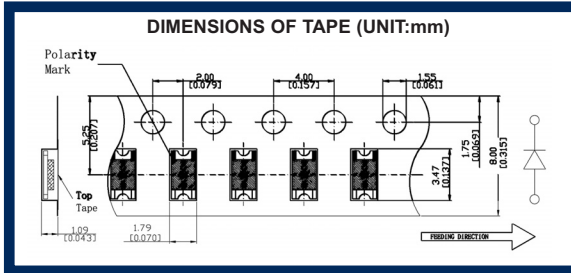
DIALIGHT P/N	Power Dissipation	Forward Current	Reverse Voltage	Operating Temperature Range	Storage Temperature Range	Peak Pulse Forward Current	Electrostatic Discharge
	(mW)	(mA)	(V)	(°C)	(°C)	(mA)	(HBM)
598-9210-107F	60	25	5	-30~+85	-40~+100	100	2000
598-9220-107F	60	25	5	-30~+85	-40~+100	100	2000
598-9230-107F	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



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MECHANICAL DIMENSIONS

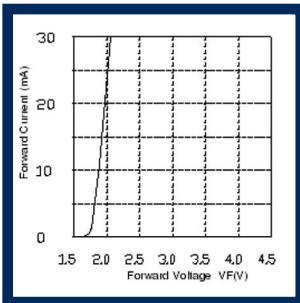


REFLOW SOLDERING	HAND SOLDERING
Pre-heat	160~180°C
Pre-heat time	120 seconds Max.
Peak temperature	260°C Max.
Soldering time	10 seconds Max.
Condition	Refer to temperature profile
Temperature	300°C Max.
Soldering time	3 second Max (one time only)

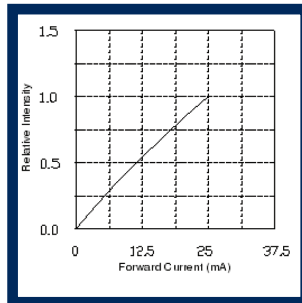
OPTICAL AND ELECTRICAL CHARACTERISTICS CURVES

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

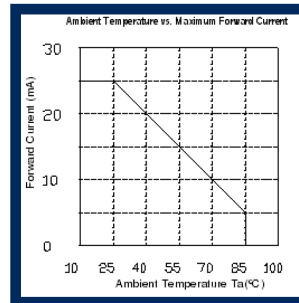
FORWARD VOLTAGE VS FORWARD CURRENT (Ta=25°C)



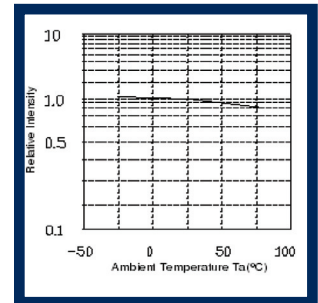
RELATIVE INTENSITY VS FORWARD CURRENT (Ta=25°C)



DERATING

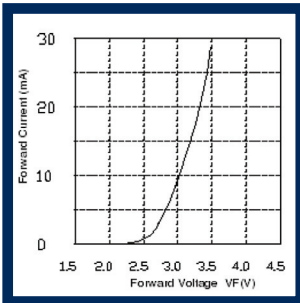


RELATIVE INTENSITY VS AMBIENT TEMPERATURE

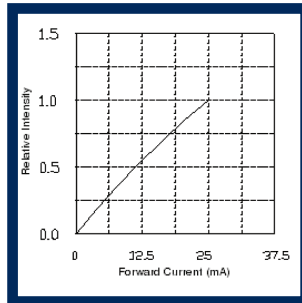


GREEN 520-525NM, BLUE 470-475NM

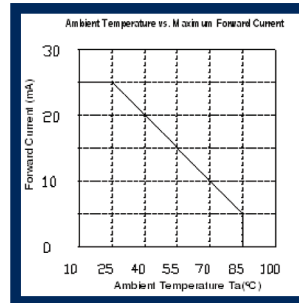
FORWARD VOLTAGE VS FORWARD CURRENT (Ta=25°C)



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



DERATING



RELATIVE INTENSITY VS AMBIENT TEMPERATURE

