



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Dialight

Micro LED® SMD LED

“598 SERIES” 1208 PACKAGE

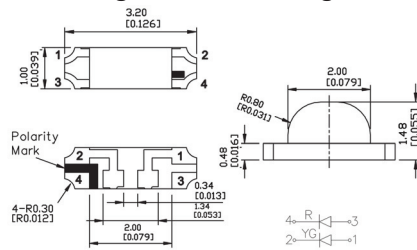
(3.2mm X 1.5mm X 1.0mm) Bi-Color Right Angle



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.

Package Outline Drawing:



Notes 1. All dimensions are in mm [inches];
2. Tolerances are ±0.1mm [0.004inch] unless noted.

ORDERING INFORMATION

5 9 8 - 8 5 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
				If = 20 ma			If = 20 ma			If = 20 ma				
				MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX		
598-8510-207F	RED	AllInGaP	Water Clear	40	60	80	630	635	645	1.8	2	2.4	160	4 → R → 3 2 → G → 1
	GREEN	AllInGaP	Water Clear	30	40	50	560	565	570	1.8	2	2.4	160	4 → R → 3 2 → G → 1
598-8520-207F	RED-ORANGE	AllInGaP	Water Clear	80	110	150	620	625	630	1.8	2	2.4	160	4 → R → 3 2 → G → 1
	GREEN	AllInGaP	Water Clear	30	40	50	560	568	570	1.8	2	2.4	160	4 → R → 3 2 → G → 1
598-8530-207F	ORANGE	AllInGaP	Water Clear	80	100	150	600	605	610	1.8	2	2.4	160	4 → R → 3 2 → G → 1
	GREEN	AllInGaP	Water Clear	30	45	60	560	568	570	1.8	2	2.4	160	4 → R → 3 2 → G → 1
598-8540-207F	YELLOW	AllInGaP	Water Clear	90	110	150	587	590	592	1.8	2	2.4	160	4 → Y → 3 2 → G → 1
	GREEN	AllInGaP	Water Clear	30	40	60	560	565	570	1.8	2	2.4	160	4 → Y → 3 2 → G → 1
598-8550-207F	YELLOW	AllInGaP	Water Clear	80	-	100	587	590	592	1.8	2	2.2	160	4 → Y → 3 2 → G → 1
	GREEN	InGaN	Water Clear	90	-	120	520	525	530	2.7	3.2	3.5	160	4 → Y → 3 2 → G → 1
598-8560-207F	RED	AllInGaP	Water Clear	40	50	60	630	635	645	1.8	2.2	2.4	160	4 → R → 3 2 → Y → 1
	RED	AllInGaP	Water Clear	40	60	80	630	635	640	1.8	2.2	2.4	160	4 → R → 3 2 → Y → 1
598-8570-207F	YELLOW-GREEN	AllInGaP	Water Clear	30	40	50	565	570	575	2.8	3.2	3.4	160	SEE EXAMPLE
598-8580-207F	BLUE	InGaN	Water Clear	60	70	80	470	473	475	3	3.2	3.4	160	4 → B → 3 2 → G → 1
	GREEN	InGaN	Water Clear	200	220	240	520	523	525	2.7	3.2	3.5	160	4 → B → 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)
598-8510-207F	48	20	5	-40~+100	-40~+100	100	1000
	48	20	5	-40~+100	-40~+100	100	1000
598-8520-207F	48	20	5	-40~+100	-40~+100	100	1000
	48	20	5	-40~+100	-40~+100	100	1000
598-8530-207F	72	30	5	-40~+85	-40~+100	100	1000
	72	30	5	-40~+85	-40~+100	100	1000
598-8540-207F	48	20	5	-40~+100	-40~+100	100	1000
	48	20	5	-40~+100	-40~+100	100	1000
598-8550-207F	72	30	5	-30~+85	-30~+100	100	1000
	105	30	5	-30~+85	-30~+100	100	1000
598-8560-207F	72	30	5	-30~+85	-30~+100	100	1000
	72	30	5	-30~+85	-30~+100	100	1000
598-8570-207F	72	30	5	-40~+85	-40~+100	100	1000
	102	30	5	-40~+85	-40~+100	100	1000
598-8580-207F	102	30	5	-30~+85	-30~+100	100	1000
	105	30	5	-30~+85	-30~+100	100	1000



A4703



ISO 9001



Dialight Corporation

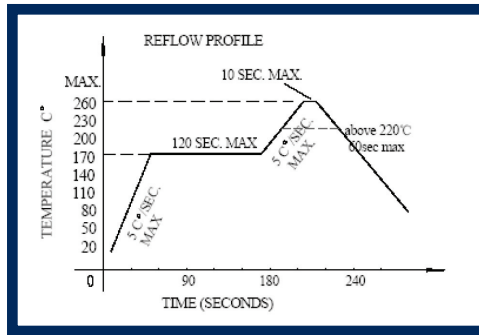
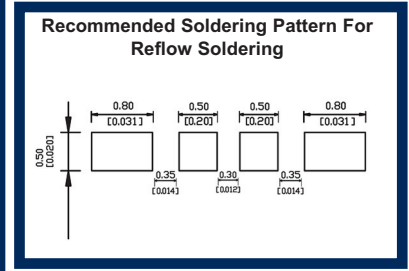
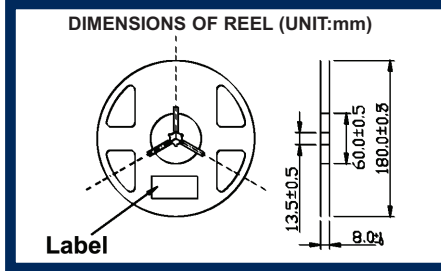
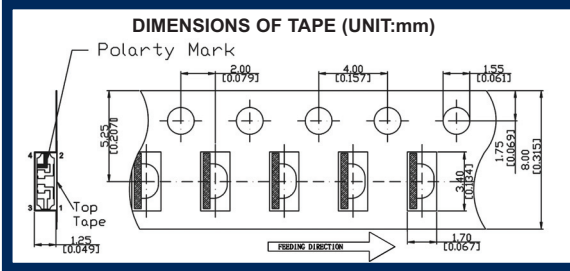
1501 Route 34 South • Farmingdale, NJ 07727 USA

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MECHANICAL DIMENSIONS

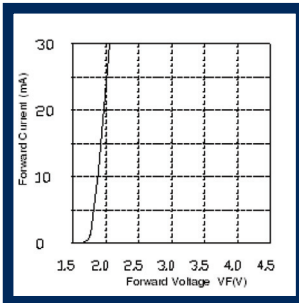


	REFLOW SOLDERING	HAND SOLDERING
Pre-heat	160~180°C	Temperature
Pre-heat time	120 seconds Max.	300°C Max.
Peak temperature	260°C Max.	Soldering time
Soldering time	10 seconds Max.	3 second Max (one time only)
Condition	Refer to temperature -profile	

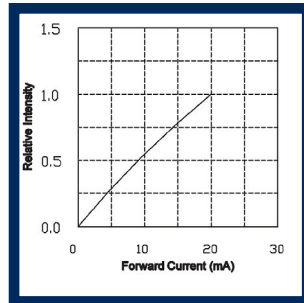
OPTICAL AND ELECTRICAL CHARACTERISTICS CURVES

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

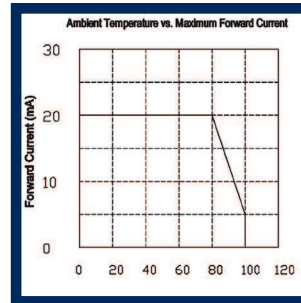
FORWARD VOLTAGE VS FORWARD CURRENT (Ta=25°C)



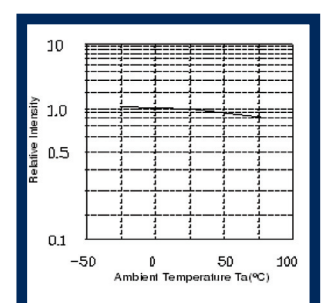
RELATIVE INTENSITY VS FORWARD CURRENT (Ta=25°C)



DERATING

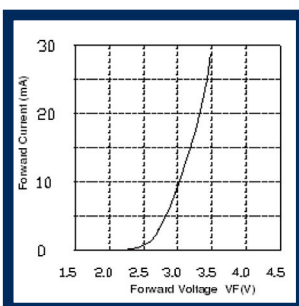


RELATIVE INTENSITY VS AMBIENT TEMPERATURE

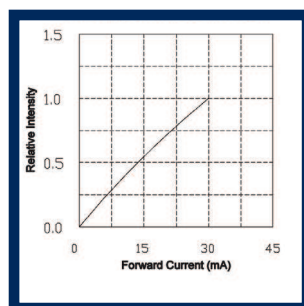


GREEN 520-525NM, BLUE 470-475NM

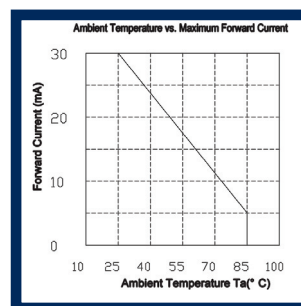
FORWARD VOLTAGE VS FORWARD CURRENT (Ta=25°C)



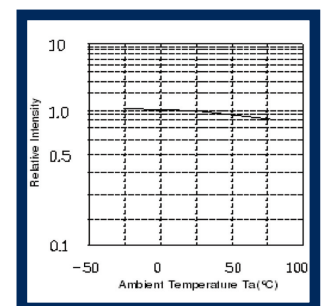
RELATIVE INTENSITY VS FORWARD CURRENT (Ta=25°C)



DERATING



RELATIVE INTENSITY VS AMBIENT TEMPERATURE



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