



Surface Mount LED

0805 Type Package High Intensity LEDs

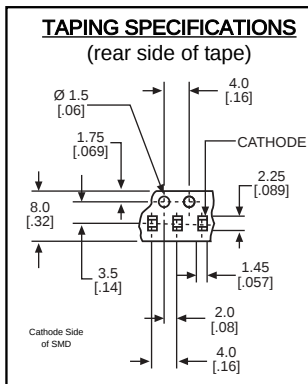
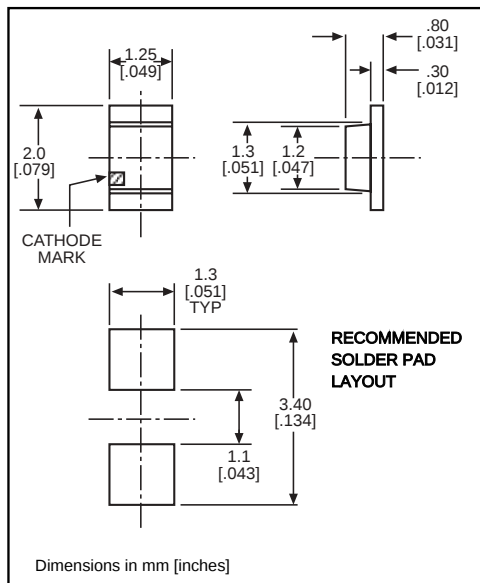
Dialight

597-3xxx-4xx

597-5x11-4xx

597-5202-4xx

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*ORDERING INFORMATION

597-3xxx-4xx

packaging option

02	20 pieces on tape
07	7" reel, 4000 pcs/reel

PART NO.*

COLOR

597-3003-4xx AllnGaP Red

597-3212-4xx Orange

597-3222-4xx Yellow

597-5111-4xx Red

597-5202-4xx Orange

597-5311-4xx Green

597-5411-4xx Yellow

Features

- Very bright light output
- Highly efficient AllnGaP die
- Compatible with automatic placement equipment
- Compatible with infrared reflow processes
- Packaged on 8mm tape, 7" reels (meets EIA-481-1 standard)
- Compatible with Dialight's Optopipe™ Series light pipes

ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)	AllnGaP Red	Orange	Yellow	Red	Orange	Green	Yellow
	-3003	-3212	-3222	-5111	-5202	-5311	-5411
Power Dissipation (mW)	81	81	81	57.5	70	70	70
Forward Current (mA)	30	30	30	25	25	25	25
Derating (mA/°C) From 25°C	.43	.43	.43	.36	.36	.36	.36
Peak Current (mA)	100	100	100	60	60	60	60
Pulse width = 1 μs							
Operating Temperature (°C)	-40/+85	-40/+85	-40/+85	-30/+85	-30/+85	-30/+85	-30/+85
Storage Temperature (°C)	-40/+100	-40/+100	-40/+100	-40/+100	-40/+100	-40/+100	-40/+100
Soldering Profile	280°C peak 3 seconds			240°C peak 5 seconds			

Solder Adherence per MIL-STD-202E, Method 208C

OPERATING CHARACTERISTICS ($T_A=25^\circ\text{C}$)		AllnGaP Red	Orange	Yellow	Red	Orange	Green	Yellow
		-3003	-3212	-3222	-5111	-5202	-5311	-5411
Luminous Intensity (mcd)	Min.	16	16	16	7	2.2	3.8	7
	Typical	50	65	65	11.7	3.7	6.4	11.7
Peak Wavelength (nm)	Typical	630	609	594	660	605	560	570
λ_{Peak}								
Viewing Angle ($2\theta_{1/2}$)	Typical	156°	156°	156°	140°	140°	140°	140°
Forward Voltage (V)	Typical	1.9	1.9	1.9	1.7	2.2	2.1	2.1
	Max.	2.4	2.4	2.4	2.3	2.8	2.8	2.8
Reverse Current (μA)	Max	100	100	100	100	100	100	100
	($V_R = 5\text{V}$)							

 $\theta_{1/2}$ is the off axis angle at which the luminous intensity is half the axial luminous intensity