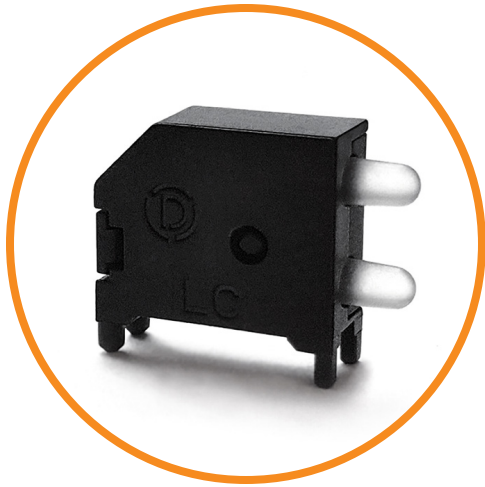


596 Series Prism® Surface Mount LED

1.6mm Round Lens, 20mA and 2mA



Certifications & Ratings

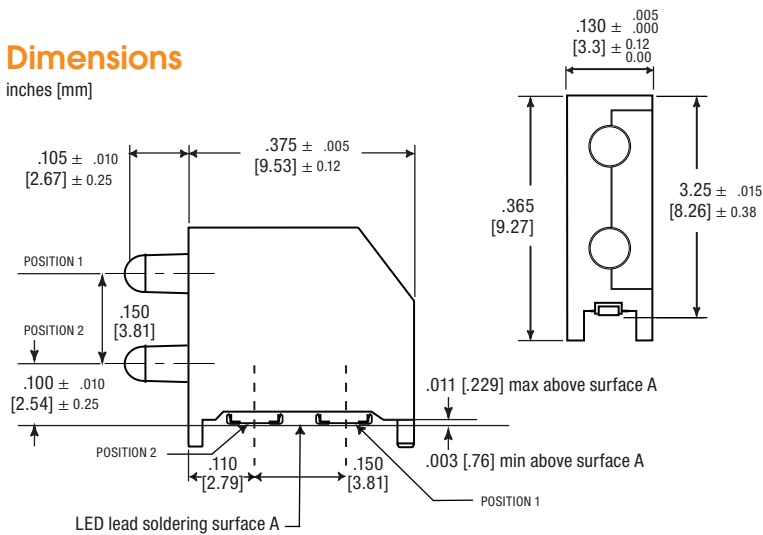
- RoHS and REACH compliant

Features & Benefits

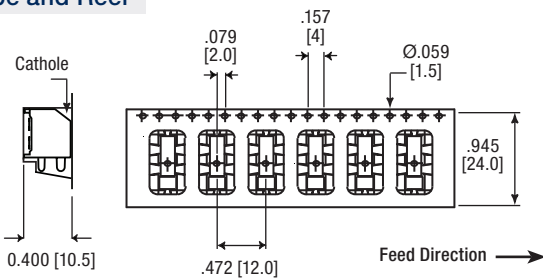
- Compatible with automatic placement equipment.
- Packaged in 16 mm tape, 13" reel (500 pcs/reel) and 10 piece sample strips.
- Compatible with surface mount reflow soldering processes.
- Housing material meets UL-94V-0 flammability ratings.
- Design provides increased indication without increased space
- Helps eliminate mixed technology PC board processing..
- Packaged in moisture barrier bags for dry packaging per IPC/JEDEC J-STD-033, MSL2 for 2 mA, MSL3 for 20 mA

Dimensions

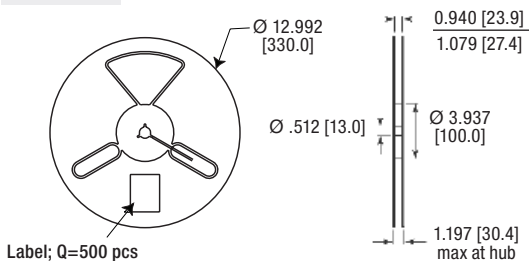
inches [mm]



Tape and Reel



13" Reel



Part Number Guide

Part Number Guide										RoHS Compliant		
5	9	6	-	X	X	X	X	-	0	X	X	F
										Packaging Option		
										0	2	10 pc tape
										1	3	13" reel / 500 pcs
										Colors		
										Position 1	Position 2	
● Red				2	0	2	0	● Red	(20 mA)			
● Red				2	0	2	3	● Yellow-Green				
● Yellow-Green				2	3	2	3	● Yellow-Green	(2 mA)			
● Yellow-Green				2	3	2	4	● Yellow				
● Yellow-Green				2	3	2	6	● Blue	(20 mA)			
● Yellow				2	4	2	0	● Red				
● Yellow				2	4	2	3	● Yellow-Green	(2 mA)			
● Yellow				2	4	2	4	● Yellow				
● Yellow				2	4	2	9	● Green	(20 mA)			
● Orange				2	5	2	5	● Orange				
● Blue				2	6	2	6	● Blue	(2 mA)			
● Green				2	9	2	6	● Blue				
● Green				2	9	2	9	● Green	(20 mA)			
● Red				1	0	1	0	● Red				
● Yellow				1	4	1	4	● Yellow	(2 mA)			
● Orange				1	5	1	5	● Orange				
● Ice Blue				1	6	1	6	● Ice Blue	(20 mA)			
○ White				1	8	1	8	○ White				

Soldering pad layout and reflow profiles shown on reverse >



Electrical/Optical Characteristics

Dialight P/N		Emitted Color		Material	If = 20mA				Viewing Angle (°deg.)	Reverse Current Intensity (µA) (Ir) VR=5V
10-Piece Tape	13" Reel, 500 pcs	Position 1	Position 2		Luminous Intensity (mcd)		Dominant Wavelength			
				Typ		Typ		Typ	Max	
596-2020-002F	596-2020-013F	● Red	● Red	AllInGaP	35	35	625	625	1.8	2.4
596-2023-002F	596-2023-013F	● Red	● Yellow-Green		35	3	625	570	1.8	2.4
596-2323-002F	596-2323-013F	● Yellow-Green	● Yellow-Green		3	3	570	570	1.8	2.4
596-2324-002F	596-2324-013F	● Yellow-Green	● Yellow		3	20	570	590	1.8	2.4
596-2326-002F	596-2326-013F	● Yellow-Green	● Blue	AllInGaP/InGaN	3	20	570	470	1.8 / 2.8	2.4 / 3.3
596-2420-002F	596-2420-013F	● Yellow	● Red	AllInGaP	20	35	590	630	1-8	2-4
596-2423-002F	596-2423-013F	● Yellow	● Yellow-Green		20	3	590	570	1-8	2.4
596-2424-002F	596-2424-013F	● Yellow	● Yellow		20	20	590	590	1-8	2-4
596-2429-002F	596-2429-013F	● Yellow	● Green	AllInGaP/InGaN	20	140	590	525	1.8 / 2.8	2.4 / 3.3
596-2525-002F	596-2525-013F	● Orange	● Orange	AllInGaP	17	17	605	605	1-8	2-4
596-2626-002F	596-2626-013F	● Blue	● Blue	InGaN	20	20	470	470	2.8	3.3
596-2926-002F	596-2926-013F	● Green	● Blue		140	20	525	470	2.8	3.3
596-2929-002F	596-2929-013F	● Green	● Green		140	140	525	525	2.8	3.3

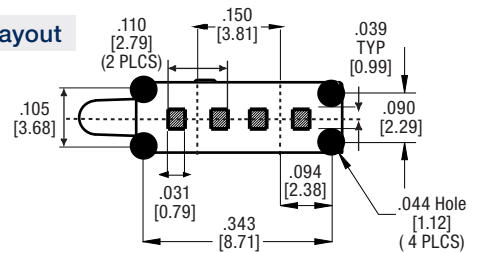
		10 If=mA		If = 2 mA						
		Typ (mcd)		Min	Typ	Max	Typ	Max		
596-1010-013F	596-1010-013F	● Red	● Red	26	26	624	630	635	1.7	2.2
596-1414-013F	596-1414-013F	● Yellow	● Yellow	5	5	600	606	609	1.7	2.2
596-1515-013F	596-1515-013F	● Orange	● Orange	5.5	5.5	580	587	595	1.7	2.2
596-1616-013F	596-1616-013F	● Ice Blue	● Ice Blue	6.5	6.5	Typ x=0.2, y=0.3		2.5	3.1	30
596-1818-013F	596-1818-013F	○ White	○ White	9.3	9.3	x=0.33, y=0.33		2.5	3.1	

Absolute Maximum Ratings

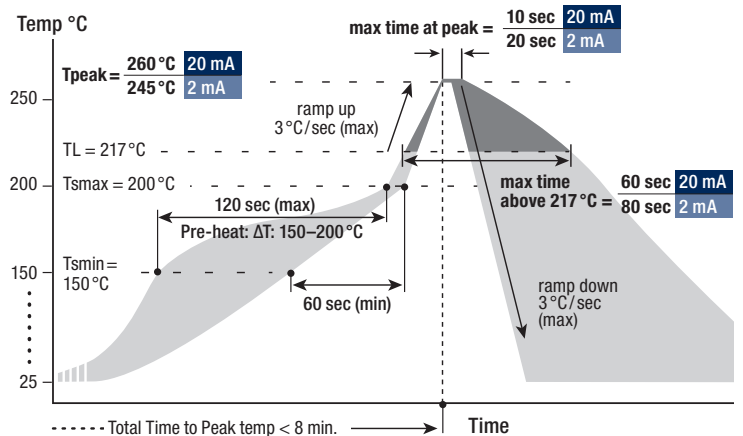
@ Ts=25 °C

	If = 20 mA		If = 2 mA	
Power Dissipation (mW)	● R, ● Y, ● YG	48	-	
	● O	60	-	
	● G	70	-	
Forward Current (mA)	all	20	● R, ● O, ● Y, ○ W	20
			● IB	15
Peak Pulse Fwd Current (mA)	● R, ● Y, ● YG, ● G	100	● R, ● O, ● Y	100
	● O	80	● IB	150
			○ W	200
Reverse Voltage (V)	all	5	● R, ● O, ● Y	12
			● IB, ○ W	5
Operating Temp (°C)	-40°C to +85°C		-40°C to +100°C	
Storage Temp (°C)	-40°C to +100°C			
ESD Volt (HBM)	>2000			

Soldering Pad Layout



Reflow Profile



Dialight reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.dialightsignalsandcomponents.com

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