Dialight
Signals & Components

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591 SERIES

PRISM® Surface Mount LED

3mm Round Lens

APPLICATIONS

Data center infrastructure
Telecommunication
Electronic test and measurement instruments
Automation
Medical
Wireless infrastructure

CERTIFICATIONS & RATINGS

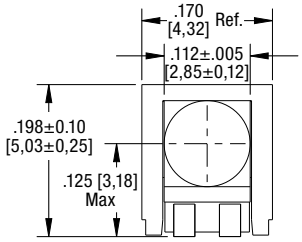
RoHS compliant

FEATURES & BENEFITS

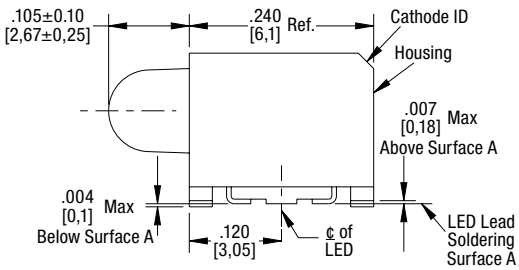
- SMT LED Technology designed to survive 260°C peak reflow temperature
- Eliminates wave soldering process
- Black, low profile PPA housing enhances the contrast ratio for better clarity
- Compatible with automatic pick-and-place equipment for reduced installation costs
- Ideal for limited space applications and board edge mounting

DIMENSIONS inches [mm]

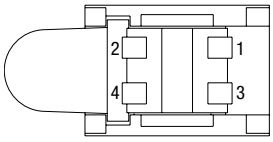
FRONT VIEW



SIDE VIEW



BOTTOM VIEW

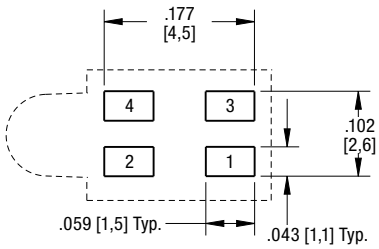


MULTI-COLOR LED PIN REFERENCE

Code	LED Color	Pin 1	Pin 2	Pin 3	Pin 4
30	Red / Yellow-Green	Red Cathode	Red Anode	Yellow-Green Anode	Yellow-Green Cathode
31	Yellow / Yellow-Green	Yellow Cathode	Yellow Anode	Yellow-Green Anode	Yellow-Green Cathode
32	Red / Yellow	Red Cathode	Red Anode	Yellow Anode	Yellow Cathode
33	Yellow / Green	Green Cathode	Green Anode	Yellow Cathode	Yellow Anode
37	Red / Green / Blue	Red Cathode	Common Anode	Green Cathode	Blue Cathode
42	Red / Green / Blue	Red Cathode	Common Anode	Green Cathode	Blue Cathode

Red, yellow, green and yellow-green LEDs 2 kV HBM • Blue LEDs 500 V HBM

RECOMMENDED PAD LAYOUT



OPERATING CHARACTERISTICS AT 25°C AMBIENT

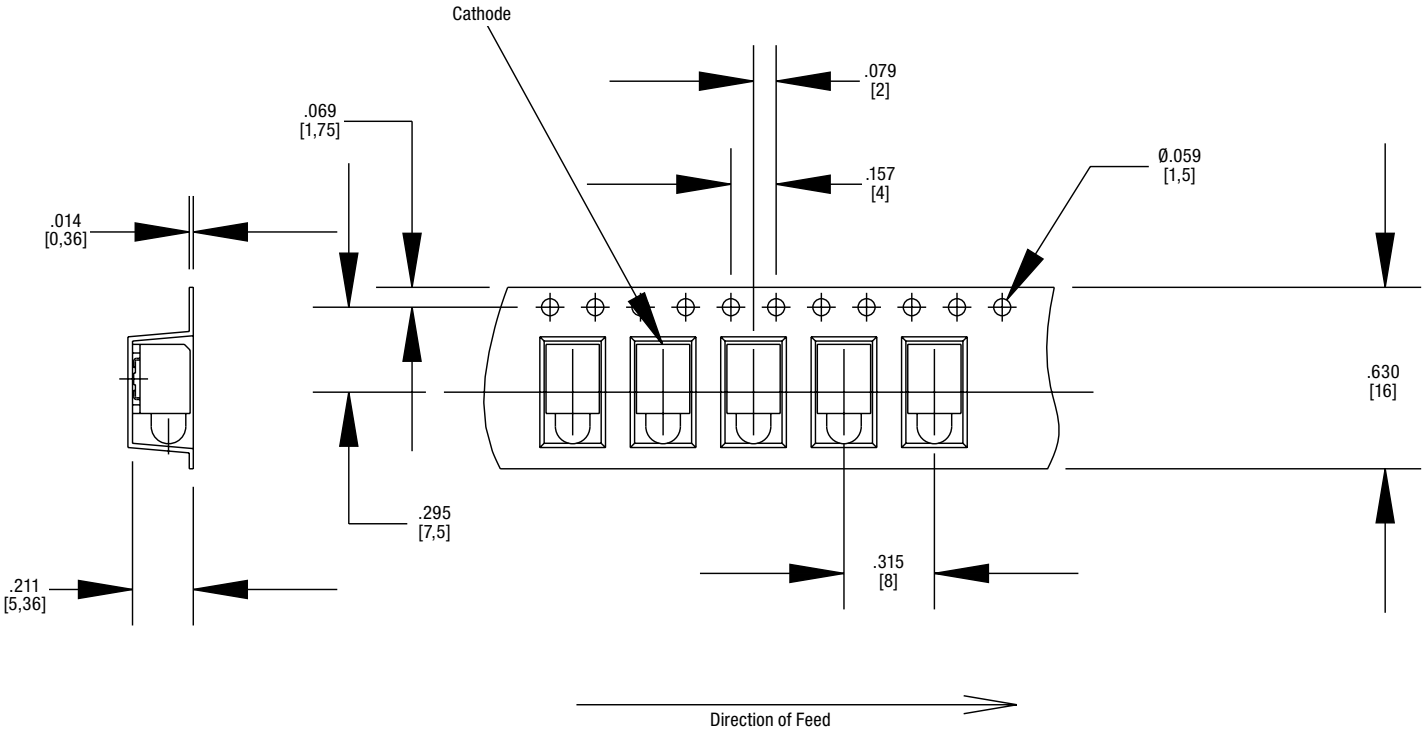
7" Reel	13" Reel	LED Color	Luminous Intensity (mcd)	Forward Voltage (V)		Dominant Wavelength (nm)	Reverse Current (µA)	MSL Rating	Viewing Angle
			Typ.	Min.	Max.	Typ.	Max.		
			IF=2mA						
591-3001-007F	591-3001-013F	Red	15	1.7	2.2	630	10	2	40
		Yellow-Green	9			570			
591-3101-007F	591-3101-013F	Yellow	20	1.7	2.2	587	10	2	40
		Yellow-Green	9			570			
			IF=20mA						
591-3201-007F	591-3201-013F	Red	21	1.8	2.3	633	10	2	40
		Yellow	30	1.9	2.4	587			
591-3302-007F	591-3302-013F	Yellow	145	1.8	2.4	590	10	3	40
		Green	245	2.8	3.4	520			
591-3703-007F	591-3703-013F	Red	200	1.8	2.4	620	10	3	40
		Green	850	2.8	3.6	523			
		Blue	125	2.8	3.6	470			
591-4203-007NF	591-4203-013NF	Red	85	1.5	2.4	630	10	3	40
		Green	750	2.8	3.6	525	50		
		Blue	100	2.8	3.6	470	50		

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT

	Code 30		Code 31		Code 32		Code 33		Code 37			Code 42			Units
	Red	Yellow-Green	Yellow	Yellow-Green	Red	Yellow	Yellow	Green	Red	Green	Blue	Red	Green	Blue	
Continuous Forward Current	15		15		30		20		30			50	30	30	mA
Reverse Voltage	12		12		12		5		5			5			V
Peak Forward Current	100		100		200		125		100			130	100	100	mA
Power Dissipation							72	102	75	108	108	120	108	108	mW
Operating Temperature Range	-40 to +100								-40 to +85						°C
Storage Temperature Range	-40 to +100								-40 to +100						°C
IR Reflow Soldering Profile for Lead-Free Soldering							260 for 10 second max								°C

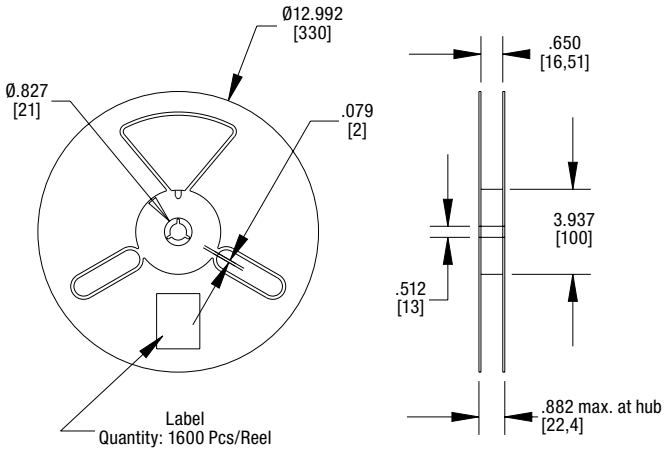
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TAPE AND REEL SPECIFICATIONS

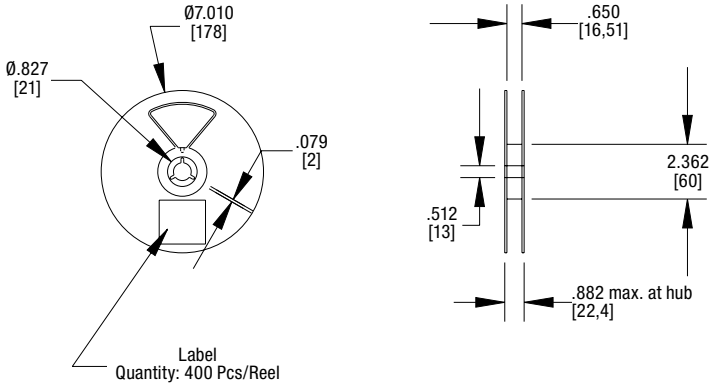


Tolerance: .004 unless otherwise specified. Millimeter dimensions shown for reference only.

13" Diameter

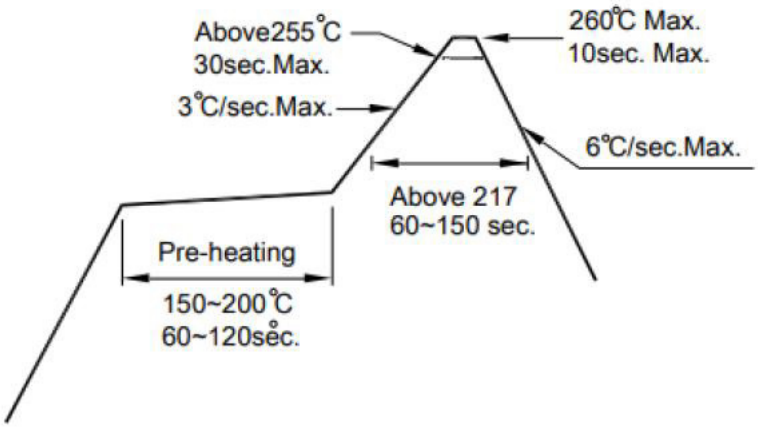


7" Diameter



REFLOW SOLDERING PROFILE:

Note: Reflow soldering should not be done more than two times.



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RoHS compliant

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