

Certifications & Ratings

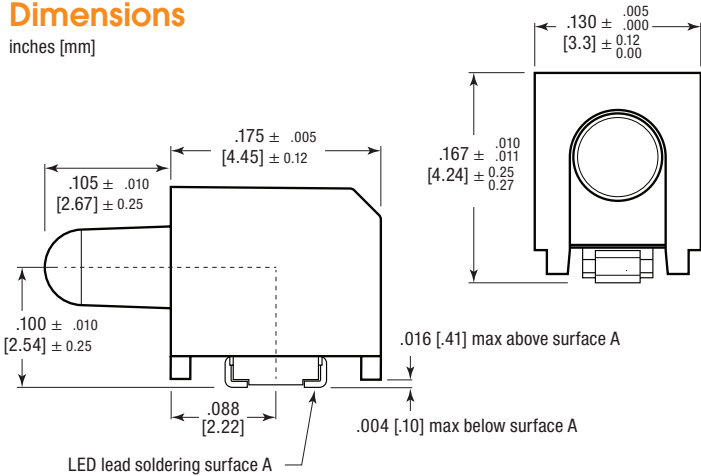
- RoHS and REACH compliant

Features & Benefits

- Compatible with automatic placement equipment.
- Packaged in 16mm tape, 7" reel (400 pcs/reel), 13" reel (1600 pcs/reel) and 20 piece strips.
- Compatible with surface mount reflow soldering processes.
- Housing material meets UL-94V-0 flammability ratings.
- Design provides increased indication without increased space.
- Packaged in moisture barrier bags for dry packaging per IPC/JEDEC J-STD-033.
- Helps eliminate mixed technology PC board processing.
- MSL2 for 2mA, MSL3 for 20mA

Dimensions

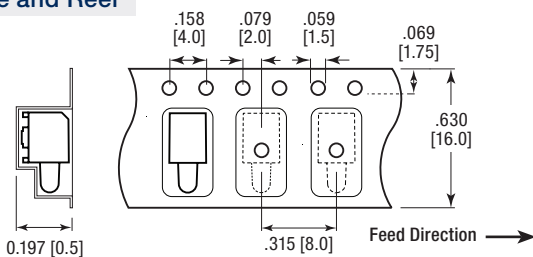
inches [mm]



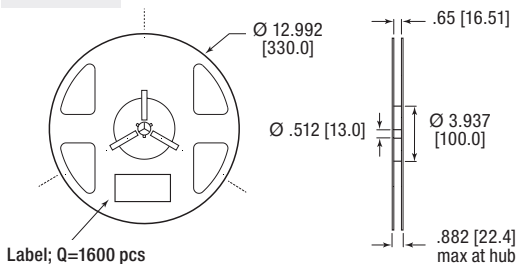
Part Number Guide

Color			Current		Packaging Option		
● Red	0	0	1	20mA	0	2	20 pc tape
● Orange	5	0	1		0	7	7" reel / 400 pcs
● Yellow	4	0	1		1	3	13" reel / 1600 pcs
● Yellow-Green	3	0	1				
● Green	9	0	1				
● Red	0	0	4	2mA			
● Orange	5	0	4				
● Yellow	4	0	4				
● Ice Blue	6	0	4				
○ White	8	0	4				

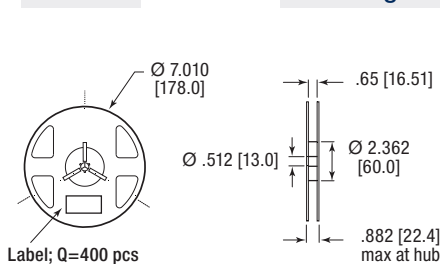
Tape and Reel



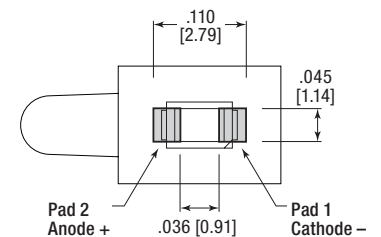
13" Reel



7" Reel



Soldering Pad Layout



Reflow profiles shown on reverse >



Electrical/Optical Characteristics

Dialight P/N			Emitted Color	Material	Luminous Intensity	Dominant Wavelength		Forward Voltage		Viewing Angle (°deg.)	Reverse Current Intensity (µA) (Ir) VR=5V	
20-Piece Tape	7" Reel, 400 pcs	13" Reel, 1600 pcs			If = 20mA							
					Typ	Min	Typ	Max	Typ	Max		
594-2001-002F	594-2001-007F	594-2001-013F	● Red	AlInGaP	54	–	625	–	1.8	2.4	120	10
594-2501-002F	594-2501-007F	594-2501-013F	● Orange		38	–	605	–	1.8	2.4		
594-2401-002F	594-2401-007F	594-2401-013F	● Yellow		48	–	590	–	1.8	2.4		
594-2301-002F	594-2301-007F	594-2301-013F	● Yellow-Green		9	–	570	–	1.8	2.4		
594-2901-002F	594-2901-007F	594-2901-013F	● Green	InGaN	312	–	525	–	2.8	3.5		

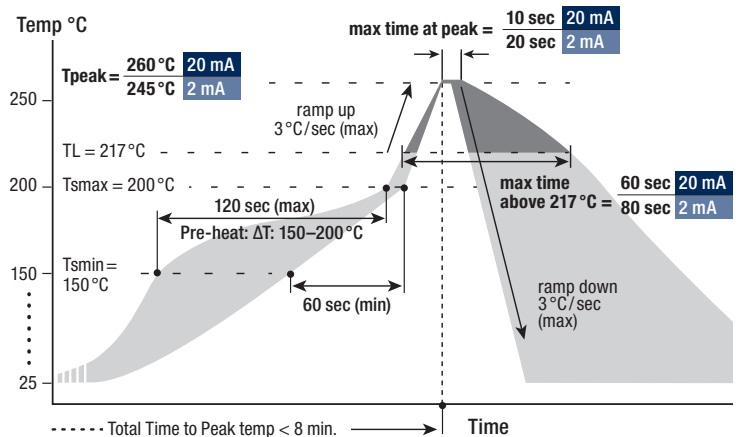
					If = 2 mA							
20-Piece Tape	7" Reel, 400 pcs	13" Reel, 1600 pcs	Emitted Color	Material	Typ	Min	Typ	Max	Typ	Max	Viewing Angle (°deg.)	Reverse Current Intensity (µA) (Ir) VR=5V
594-2004-002F	594-2004-007F	594-2004-013F	● Red	AlInGaP	2	624	630	635	1.7	2.2	120	10
594-2404-002F	594-2404-007F	594-2404-013F	● Orange		3	600	606	609	1.7	2.2		
594-2504-002F	594-2504-007F	594-2504-013F	● Yellow		2.2	580	587	595	1.7	2.2		
594-2604-002F	594-2604-007F	594-2604-013F	● Ice Blue	InGaN	3	x=0.2, y=0.3		2.5	3.1			
594-2804-002F	594-2804-007F	594-2804-013F	○ White		5	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			
Electrostatic Discharge (V)	2000			

Reflow Profile



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