

592 SERIES

PRISM® Bi- and Tri-Color Surface Mount LED

3mm Round Lens

APPLICATIONS

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

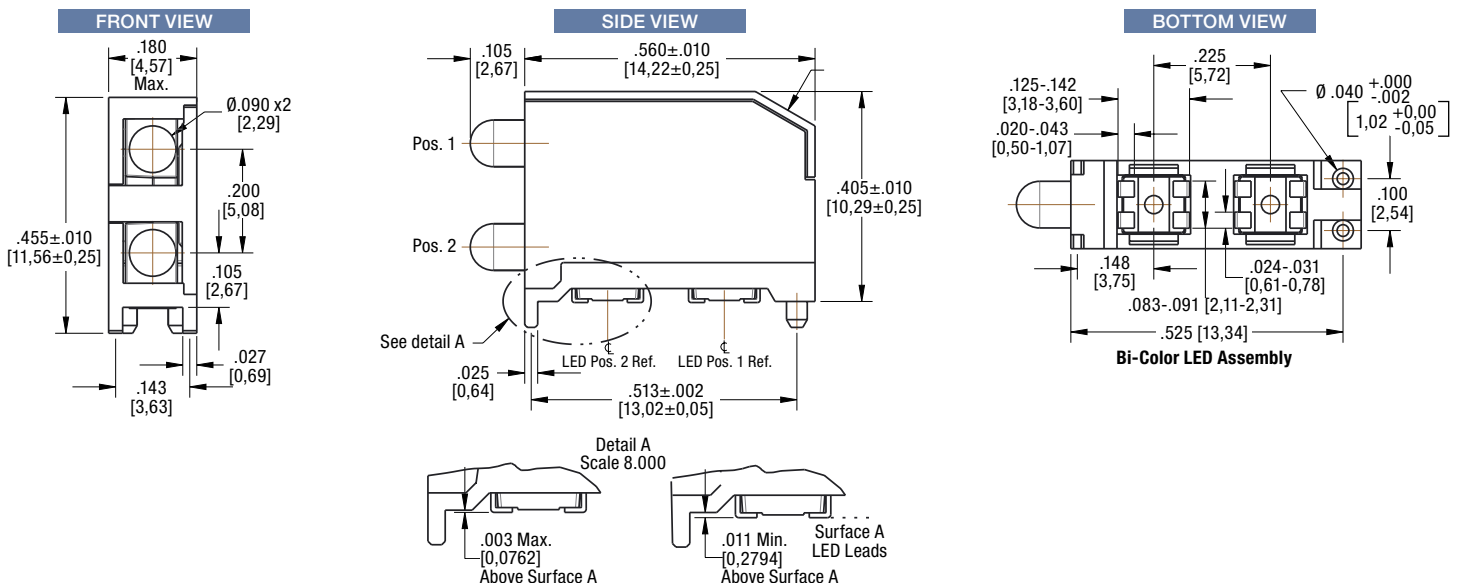
CERTIFICATIONS & RATINGS

RoHS compliant

FEATURES & BENEFITS

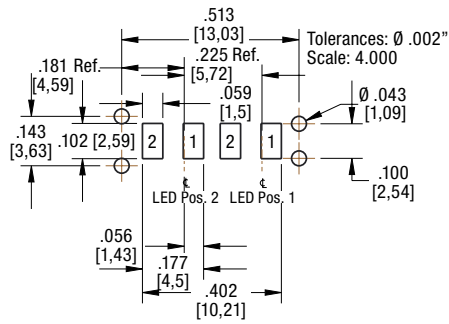
- SMT LED Technology designed to survive 260°C peak reflow temperature
- Eliminates wave soldering process
- Black, low profile PPA housing enhances the contrast ratio for better clarity
- Compatible with automatic pick-and-place equipment for reduced installation costs
- Ideal for limited space applications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

DIMENSIONS inches [mm]



RECOMMENDED PAD LAYOUT

Single-Color

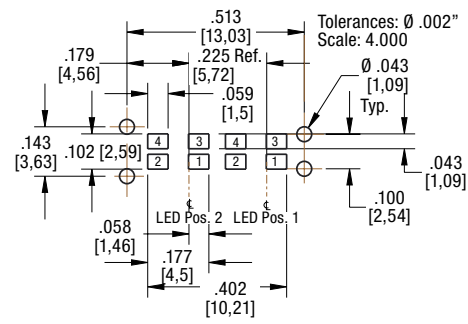


SINGLE-COLOR LED PIN REFERENCE

Code	LED Color	Pin 1	Pin 2
20	Red	Cathode	Anode
21	Red	Cathode	Anode
28	White	Cathode	Anode

RECOMMENDED PAD LAYOUT

Multi-Color



MULTI-COLOR LED PIN REFERENCE

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

OPERATING CHARACTERISTICS AT 25°C AMBIENT

13" Reel	LED Color	Luminous Intensity (mcd)	Forward Voltage (V)		Dominant Wavelength (nm)	Reverse Current (μA)	MSL Rating	LED Position
		Typ.	Min.	Max.	Typ.	Max.	Typ.	
		IF=2mA						
592-3030-313F	Red	11	1.7	2.2	630	10	2	1
	Green	5			570			
	Red	11	1.7	2.2	630	10		2
	Green	5			570			
592-3031-313F	Red	11	1.7	2.2	630	10	2	1
	Green	5			570			
	Yellow	14	1.7	2.2	587	10		2
	Green	5			570			
592-3032-313F	Red	11	1.7	2.2	630	10	2	1
	Green	5			570			
	Red	21	1.8	2.3	633	10		2
	Yellow	24			587			
592-3034-313F	Red	11	1.7	2.2	630	10	3	1
	Green	5			570			
	Red	21	1.8	2.4	625	10		2
	Blue	24			470			
592-3131-313F	Yellow	14	1.7	2.2	587	10	2	1
	Green	5			570			
	Yellow	14	1.7	2.2	587	10		2
	Green	5			570			
		IF=20mA						
592-3232-313F	Red	21	1.8	2.3	633	10	2	1
	Yellow	24			587			
	Red	21	1.8	2.3	633	10		2
	Yellow	24			587			
592-3333-313F	Yellow	145	1.8	2.4	590	10	3	1
	Green	245			520			
	Yellow	145	1.8	2.4	590	10		2
	Green	245			520			

OPERATING CHARACTERISTICS AT 25°C AMBIENT

13" Reel	LED Color	Luminous Intensity (mcd)	Forward Voltage (V)		Dominant Wavelength (nm)	Reverse Current (μA)	MSL Rating	LED Position
		Typ.	Min.	Max.	Typ.	Max.	Typ.	
		IF=20mA						
592-2137-313NF	Red	45	1.8	2.5	630	10	5a	1
	Red	95		2.4	620	10		2
	Green	350	2.8	3.6	523			
	Blue	60		3.6	470			
592-3720-313NF	Red	95	1.8	2.4	620	10	5a	1
	Green	350	2.8	3.6	523			
	Blue	60	2.8	3.6	470			
	Red	40	1.8	2.3	633	10		2
592-3728-413F	Red	95	1.8	2.4	620	10	5a	1
	Green	350	2.8	3.6	523			
	Blue	60	2.8	3.6	470			
	White	100	2.5	3.1	Chromaticity Coordinates x=0.28 / y=0.25	10		2
		IF=20mA						
592-3730-313NF	Red	95	1.8	2.4	620	10	5a	1
	Green	350	2.8	3.6	523			
	Blue	60	2.8	3.6	470			
		IF=10mA				10		2
	Red	20	1.7	2.2	630			
	Green	20	1.7	2.2	570			
		IF=20mA						
592-3731-313NF	Red	95	1.8	2.4	620	10	5a	1
	Green	350	2.8	3.6	523			
	Blue	60	2.8	3.6	470			
		IF=10mA				10		2
	Yellow	25	1.7	2.2	587			
	Green	20	1.7	2.2	570			
		IF=20mA						
592-3737-313NF	Red	95	1.8	2.4	620	10	5a	1 & 2
	Green	350	2.8	3.6	523			
	Blue	60	2.8	3.6	470			
592-2142-313NF	Red	45	1.8	2.5	630	10	3	1
	Red	40	1.5	2.4	630	10		2
	Green	260	2.8	3.6	525	50		
	Blue	40	2.8	3.6	470	50		
592-4220-313NF	Red	40	1.5	2.4	630	10	3	1
	Green	260	2.8	3.6	525	50		
	Blue	40	2.8	3.6	470	50		
	Red	40	1.8	2.3	633	10		2

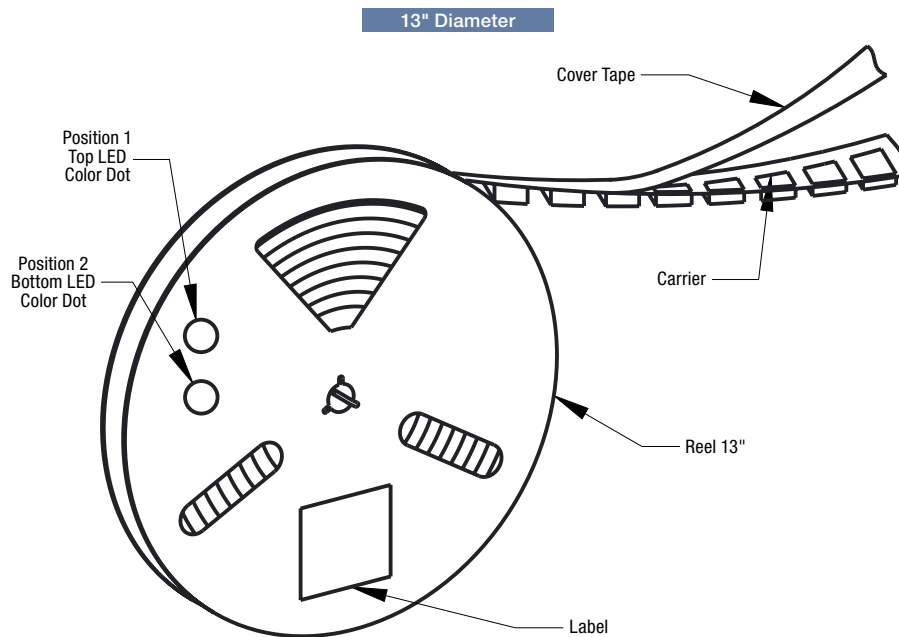
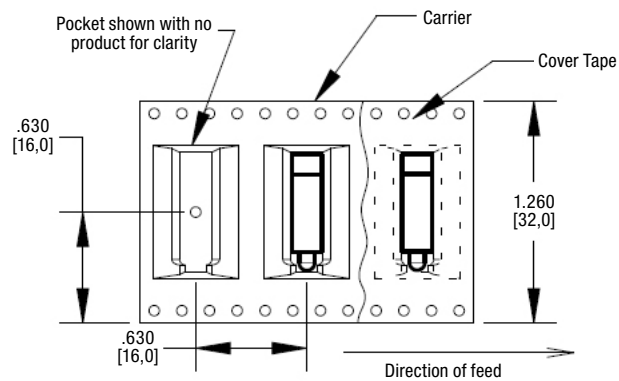
OPERATING CHARACTERISTICS AT 25°C AMBIENT

13" Reel	LED Color	Luminous Intensity (mcd)	Forward Voltage (V)		Dominant Wavelength (nm)	Reverse Current (μA)	MSL Rating	LED Position
		Typ.	Min.	Max.	Typ.	Max.	Typ.	
		IF=20mA						
592-4228-413F	Red	40	1.5	2.4	630	10	3	1
	Green	260	2.8	3.6	525	50		
	Blue	40	2.8	3.6	470	50		
	White	100	2.5	3.1	Chromaticity Coordinates x=0.28 / y=0.25	10		2
592-3733-313F	Red	95	1.8	2.4	620	10	5a	1
	Green	350	2.8	3.6	523			
	Blue	60	2.8	3.6	470			
	Yellow	145	1.8	2.4	590	10		2
	Green	245	2.8	3.4	520			
		IF=20mA						
592-4230-313NF	Red	40	1.5	2.4	630	10	3	1
	Green	260	2.8	3.6	525	50		
	Blue	40	2.8	3.6	470	50		
		IF=10mA						2
	Red	20	1.7	2.2	630	10		
	Green	20	1.7	2.2	570	10		
		IF=20mA						
592-4231-313NF	Red	40	1.5	2.4	630	10	3	1
	Green	260	2.8	3.6	525	50		
	Blue	40	2.8	3.6	470	50		
		IF=10mA						2
	Yellow	25	1.7	2.2	587	10		
	Green	20	1.7	2.2	570	10		
592-4242-413F	Red	40	1.5	2.4	630	10	3	1 & 2
	Green	260	2.8	3.6	525	50		
	Blue	40	2.8	3.6	470	50		

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT

	Code 20	Code 21	Code 28	Code 30		Code 31		Code 32		Code 33		Code 34		Code 37			Code 42			Units
	Red	Red	White	Red	Green	Yellow	Green	Red	Yellow	Yellow	Green	Red	Blue	Red	Green	Blue	Red	Green	Blue	
Continuous Forward Current	30	30	30	15		15		30		20		20		30			50	30	30	mA
Reverse Voltage	12	5	5	12		12		12		5		5		5			5			V
Peak Forward Current	250	185	100	100		100		200		125		100		100			130	100	100	mA
Operating Temperature Range	-40°C to +85°C																		°C	
Storage Temperature Range	-40°C to +100°C																		°C	

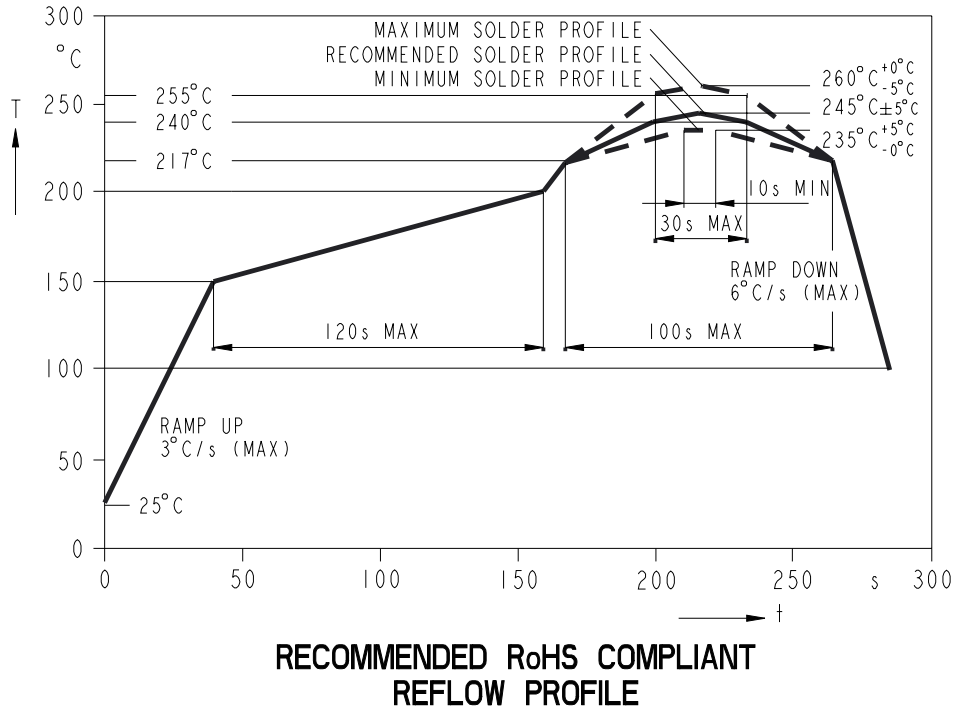
TAPE AND REEL SPECIFICATIONS



*13" Reel Per EIA Standard 481-2
*Quantity = 300 Pcs/Reel In Vacuum Sealed Bag

REFLOW SOLDERING PROFILE:

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



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