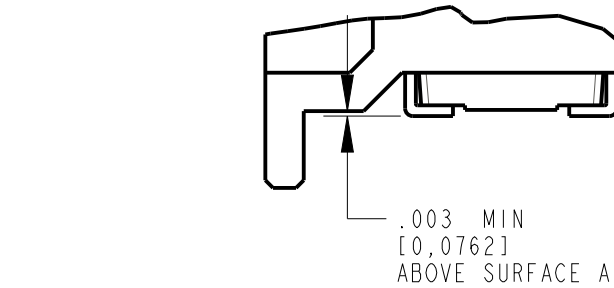
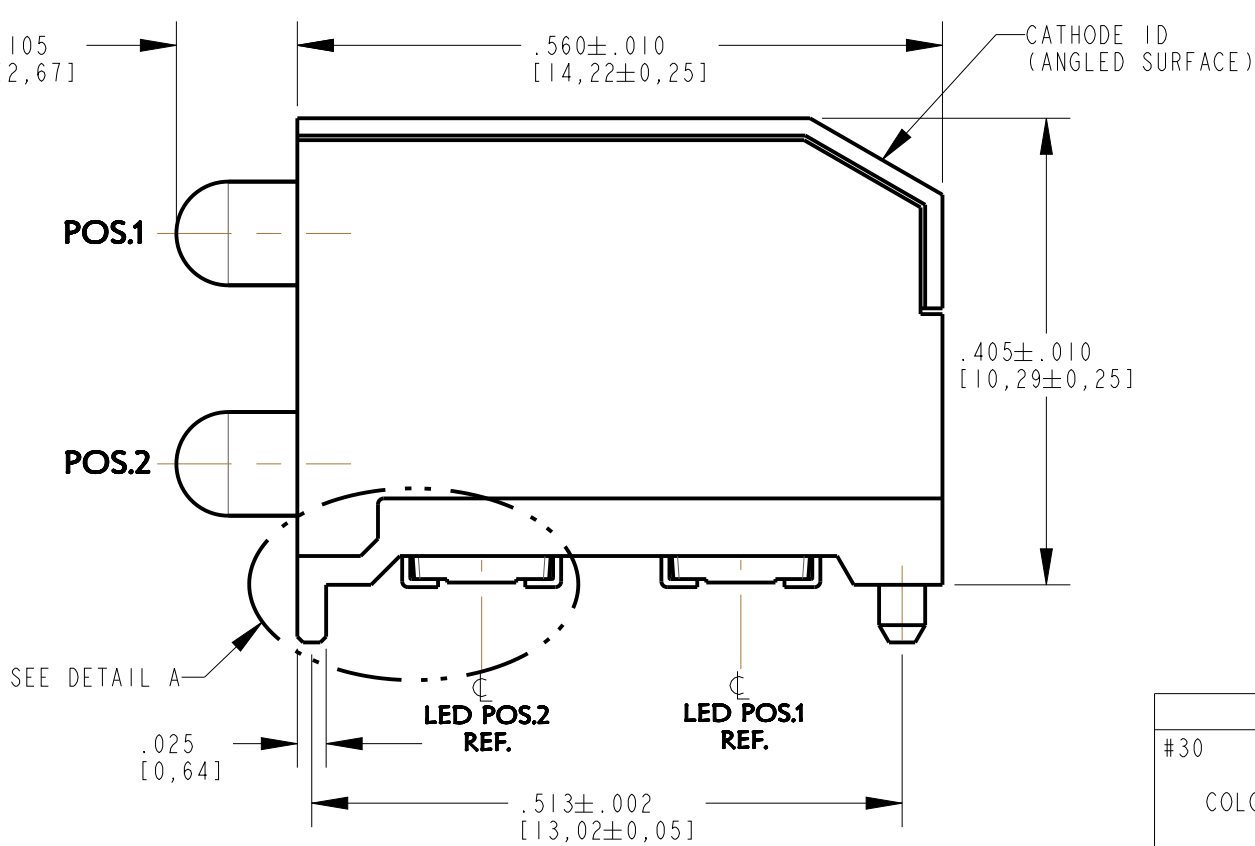
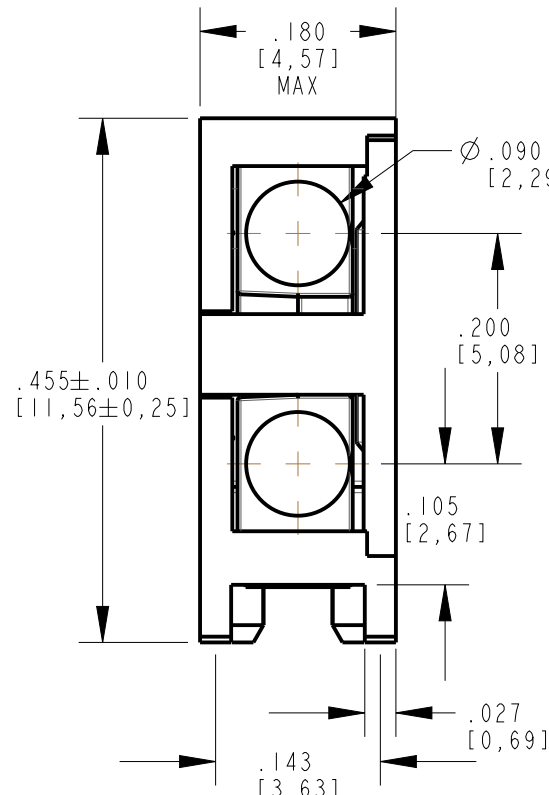


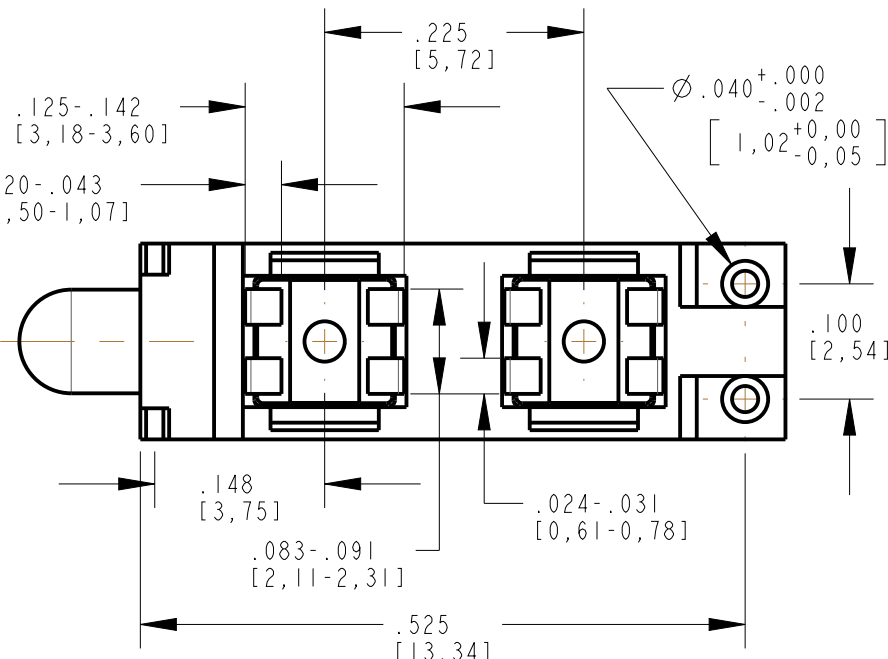
DIALIGHT PART NUMBER	PACKAGING	POSITION 1	POSITION 2	MSL
592-2020-302F	SAMPLE STRIP 13" REEL	RED [HI, EFF]	RED [HI, EFF]	2
592-2020-313F		RED [HI, EFF]	GREEN	2
592-2023-302F		RED [HI, EFF]	GREEN	2
592-2023-313F		RED [AI(GaAs)]	RED [AI(GaAs)]	2
592-2121-302F	SAMPLE STRIP 13" REEL	RED [AI(GaAs)]	RED [AI(GaAs)]	2
592-2121-313F		RED [AI(GaAs)]	YELLOW	2
592-2124-302F		RED [AI(GaAs)]	YELLOW	2
592-2124-313F		RED [AI(GaAs)]	BLUE [InGaN]	2
592-2126-302F	SAMPLE STRIP 13" REEL	RED [HI, INT]	GREEN [HI, INT]	2
592-2222-302F		GREEN [HI, INT]	GREEN [HI, INT]	2
592-2222-313F		GREEN [HI, INT]	RED [HI, EFF]	2
592-2320-302F		GREEN [HI, EFF]	GREEN [HI, INT]	2
592-2320-313F	SAMPLE STRIP 13" REEL	GREEN [HI, INT]	GREEN [HI, INT]	2
592-2323-302F		GREEN [HI, INT]	YELLOW	2
592-2323-313F		GREEN [HI, INT]	YELLOW	2
592-2324-302F		GREEN [HI, INT]	RED [HI, INT]	2
592-2326-302F	SAMPLE STRIP 13" REEL	GREEN [HI, INT]	YELLOW	2
592-2326-313F		GREEN [HI, INT]	YELLOW	2
592-2420-302F		GREEN [HI, INT]	YELLOW	2
592-2420-313F		GREEN [HI, INT]	YELLOW	2
592-2422-302F	SAMPLE STRIP 13" REEL	GREEN [HI, INT]	YELLOW	2
592-2422-313F		GREEN [HI, INT]	YELLOW	2
592-2423-302F		GREEN [HI, INT]	YELLOW	2
592-2423-313F		GREEN [HI, INT]	YELLOW	2
592-2424-302F	SAMPLE STRIP 13" REEL	GREEN [HI, INT]	YELLOW	2
592-2424-313F		GREEN [HI, INT]	YELLOW	2
592-2436-302F		GREEN [HI, INT]	ORANGE/GREEN	2
592-2436-313F		GREEN [HI, INT]	ORANGE/GREEN	2
592-2525-302F	SAMPLE STRIP 13" REEL	ORANGE [InGaP]	ORANGE [InGaP]	2
592-2525-313F		ORANGE [InGaP]	ORANGE [InGaP]	2
592-2626-302F		BLUE [InGaP]	BLUE [InGaP]	2
592-2626-313F		BLUE [InGaP]	BLUE [InGaP]	2
592-2627-302F	SAMPLE STRIP 13" REEL	BLUE [InGaP]	YELLOW	2
592-2627-313F		BLUE [InGaP]	YELLOW	2
592-2628-302F		BLUE [InGaP]	WHITE	2
592-2628-313F		BLUE [InGaP]	WHITE	2
592-2631-302F	SAMPLE STRIP 13" REEL	BLUE [InGaP]	YELLOW/GREEN	2
592-2631-313F		BLUE [InGaP]	YELLOW/GREEN	2
592-2727-302F		YELLOW [AlInGaP]	YELLOW [AlInGaP]	2
592-2727-313F		YELLOW [AlInGaP]	YELLOW [AlInGaP]	2
592-2826-302F	SAMPLE STRIP 13" REEL	WHITE [InGaP]	BLUE [InGaP]	2
592-2826-313F		WHITE [InGaP]	BLUE [InGaP]	2
592-2828-302F		WHITE [InGaP]	WHITE	2
592-2828-313F		WHITE [InGaP]	WHITE	2
592-2926-302F	SAMPLE STRIP 13" REEL	TRUE GREEN [InGaP]	BLUE [InGaP]	2a
592-2926-313F		TRUE GREEN [InGaP]	BLUE [InGaP]	2a
592-2927-302F		GREEN [InGaP]	YELLOW [AlInGaP]	2a
592-2927-313F		GREEN [InGaP]	YELLOW [AlInGaP]	2a
592-3030-302F	SAMPLE STRIP 13" REEL	RED/GREEN [InGaP]	RED/GREEN [InGaP]	2
592-3030-313F		RED/GREEN [InGaP]	RED/GREEN [InGaP]	2
592-3031-302F		RED/GREEN [InGaP]	YELLOW/GREEN [InGaP]	2
592-3031-313F		RED/GREEN [InGaP]	YELLOW/GREEN [InGaP]	2
592-3034-302F	SAMPLE STRIP 13" REEL	RED/GREEN [InGaP]	RED/BLUE [InGaP]	2a
592-3034-313F		RED/GREEN [InGaP]	RED/BLUE [InGaP]	2a
592-3126-302F		YELLOW/GREEN [InGaP]	BLUE [InGaP]	2
592-3126-313F		YELLOW/GREEN [InGaP]	BLUE [InGaP]	2
592-3131-302F	SAMPLE STRIP 13" REEL	YELLOW/GREEN [InGaP]	YELLOW/GREEN [InGaP]	2
592-3131-313F		YELLOW/GREEN [InGaP]	YELLOW/GREEN [InGaP]	2
592-3232-302F		RED/YELLOW [InGaP]	RED/YELLOW [InGaP]	2
592-3232-313F		RED/YELLOW [InGaP]	RED/YELLOW [InGaP]	2
592-3236-302F	SAMPLE STRIP 13" REEL	RED/YELLOW [InGaP]	ORANGE/GREEN [InGaP]	2
592-3236-313F		RED/YELLOW [InGaP]	ORANGE/GREEN [InGaP]	2
592-3535-302F		RED/GRN/BLUE [InGaP]	RED/GRN/BLUE [InGaP]	2
592-3535-313F		RED/GRN/BLUE [InGaP]	RED/GRN/BLUE [InGaP]	2



DETAIL A
SCALE 8.000



++SINGLE COLOR LED ASSEMBLY++



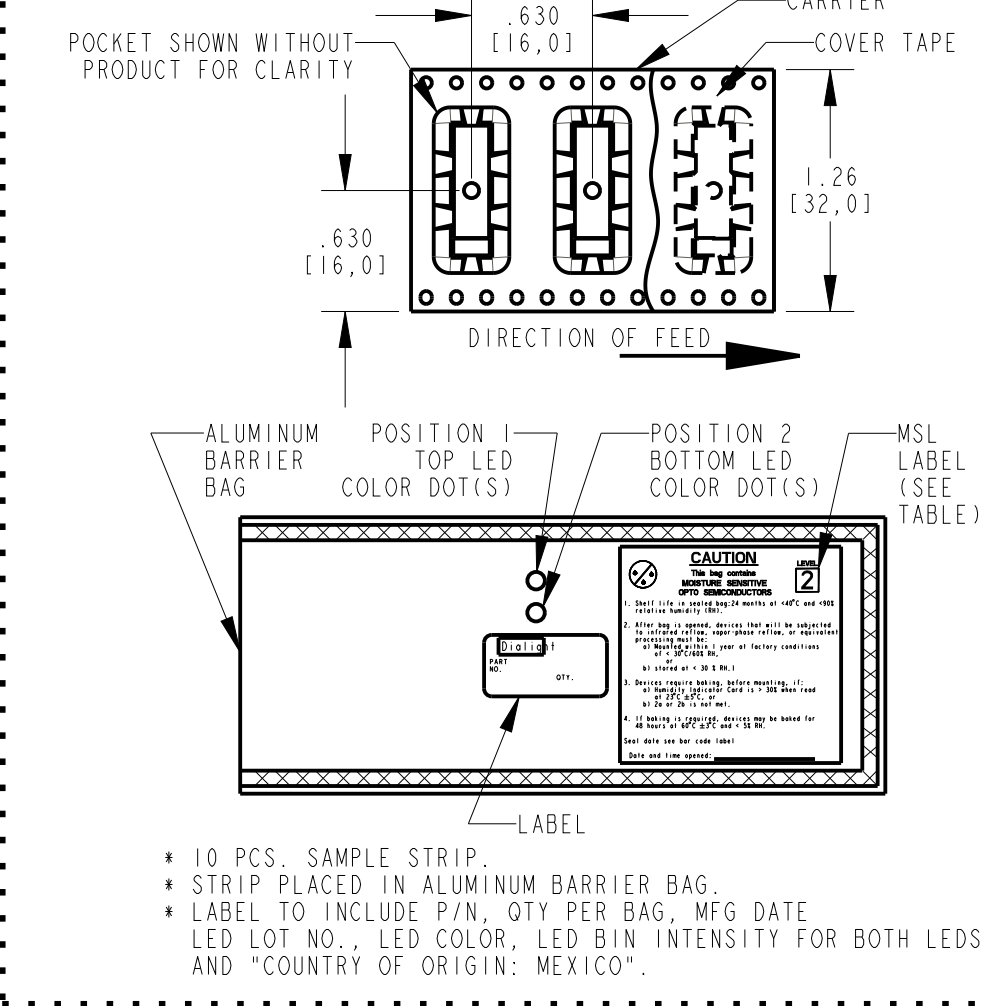
++BI-COLOR LED ASSEMBLY++

OPERATING CHARACTERISTICS AT 25°C AMBIENT - SINGLE COLOR LEDs						
#	COLOR	LUMINOUS INTENSITY (mcd)	TEST CURRENT (mA)	DOMINANT WAVELENGTH (nm)		REVERSE CURRENT (μA)
				MIN	MAX	
20	RED [HI, EFF]	3	10	622	628 634	10 @ V _R =12 V
21	RED [AI(GaAs)]	9	10	—	645	10 @ V _R =12 V
22	GREEN [HI, INT]	6	10	564	570 576	10 @ V _R =12 V
23	GREEN	4	10	564	570 576	10 @ V _R =12 V
24	YELLOW	2	10	580	587 595	10 @ V _R =5 V
25	ORANGE	2	10	600	606 609	10 @ V _R =5 V
26	BLUE [InGaP]	6	10	462	465 468	10 @ V _R =12 V
27	YELLOW [AlInGaP]	60	20	580	587 595	10 @ V _R =12 V
28	WHITE	34	10	X=.285; .33; .367 Y=.259; .33; .401	—	10 @ V _R =5 V
29	GREEN [InGaP]	56	20	—	525	10 @ V _R =12 V

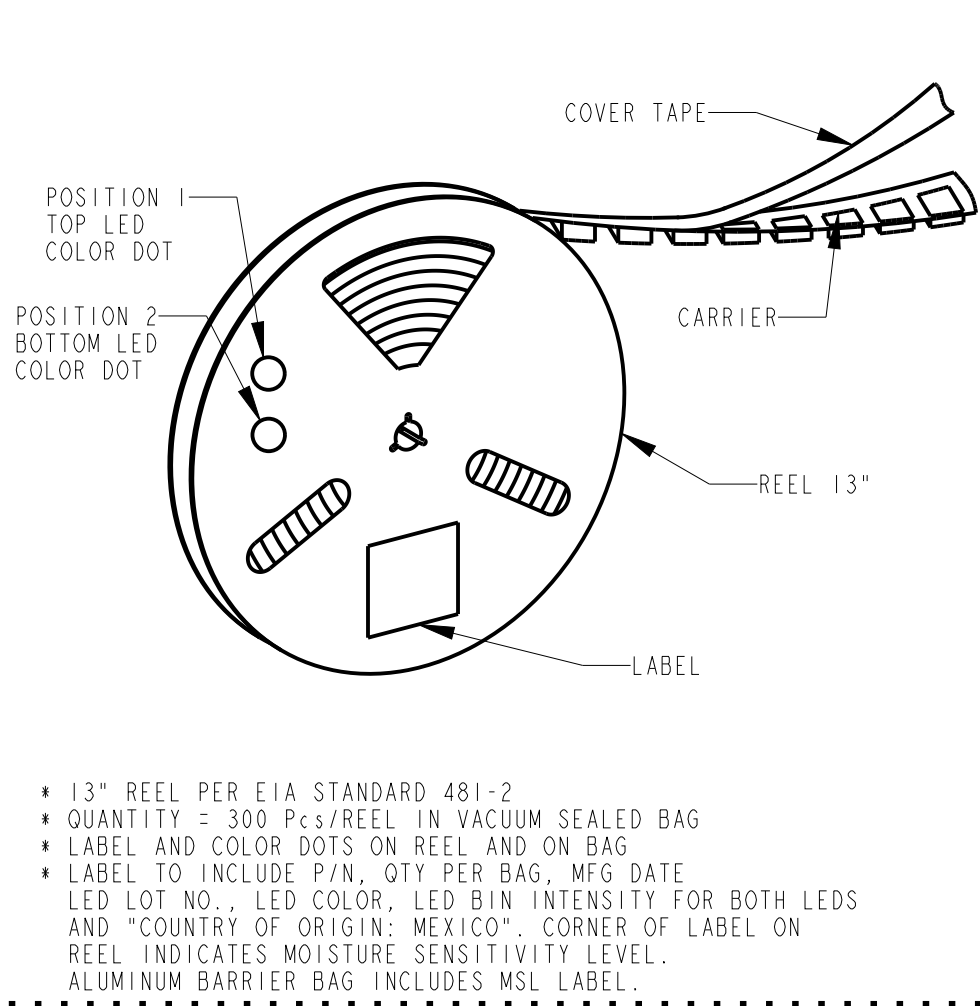
LED COLOR	PIN 1	PIN 2	PIN 3	PIN 4
RED/YELLOW	RED CATHODE	RED ANODE	YELLOW ANODE	YELLOW CATHODE
YELLOW/GREEN	YELLOW CATHODE	YELLOW ANODE	GREEN CATHODE	GREEN CATHODE
RED/GREEN	RED CATHODE	RED ANODE	GREEN ANODE	GREEN CATHODE
RED/BLUE	RED CATHODE	RED ANODE	BLUE ANODE	BLUE CATHODE
ORANGE/GREEN	ORANGE CATHODE	ORANGE ANODE	GREEN ANODE	GREEN CATHODE
R/G/B TRI-COLOR	RED CATHODE	COMMON ANODE	GREEN CATHODE	BLUE CATHODE

RECOMMENDED PAD LAYOUT - MULTI-COLOR

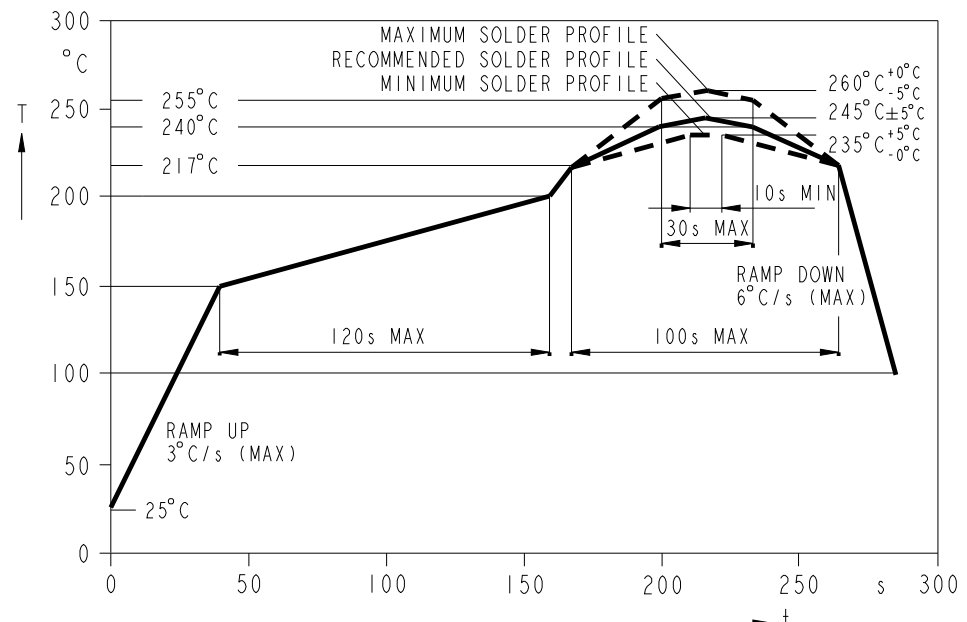
SAMPLE STRIP PACKAGING SPECIFICATION



13" REEL PACKAGING SPECIFICATION



- 13" REEL PER EIA STANDARD 481-2
- QUANTITY = 300 PCS/REEL IN VACUUM SEALED BAG
- LABEL AND COLOR DOTS ON REEL AND ON BAG
- LABEL TO INCLUDE P/N, QTY PER BAG, MFG DATE
- LED LOT NO., LED COLOR, LED BIN INTENSITY FOR BOTH LEDS AND "COUNTRY OF ORIGIN: MEXICO". CORNER OF LABEL ON REEL INDICATES MOISTURE SENSITIVITY LEVEL.
- ALUMINUM BARRIER BAG INCLUDES MSL LABEL



RECOMMENDED ROHS COMPLIANT
REFLOW PROFILE

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT - RED/GREEN BI-COLOR LED		
	COLOR	UNITS
	RED	GREEN
POWER DISSIPATION	95	95
PEAK FORWARD CURRENT (1/200 DUTY CYCLE, 10μs PULSE WIDTH)	500	500
CONTINUOUS FORWARD CURRENT	30	30
LINEAR DERATING FROM 55°C	0.66	0.66
LEAD REFLOW SOLDERING TEMPERATURE (FOR 5 SEC.)	260	°C
OPERATING TEMPERATURE	-40 TO +100	°C
STORAGE TEMPERATURE	-40 TO +100	°C

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT - YELLOW/GREEN BI-COLOR LED		
	COLOR	UNITS
	YELLOW	GREEN
POWER DISSIPATION	95	95
PEAK FORWARD CURRENT (1/200 DUTY CYCLE, 10μs PULSE WIDTH)	500	500
CONTINUOUS FORWARD CURRENT	30	30
LINEAR DERATING FROM 55°C	0.66	0.66
LEAD REFLOW SOLDERING TEMPERATURE (FOR 5 SEC.)	260	°C
OPERATING TEMPERATURE	-40 TO +100	°C
STORAGE TEMPERATURE	-40 TO +100	°C

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT - RED/YELLOW BI-COLOR LED		
	COLOR	UNITS
	RED	YELLOW
POWER DISSIPATION	80	80
PEAK FORWARD CURRENT (1/200 DUTY CYCLE, 10μs PULSE WIDTH)	1000	200
CONTINUOUS FORWARD CURRENT	30	30
LINEAR DERATING FROM 75°C	0.60	0.60
LEAD REFLOW SOLDERING TEMPERATURE (FOR 5 SEC.)	260	°C
OPERATING TEMPERATURE	-40 TO +100	°C
STORAGE TEMPERATURE	-40 TO +100	°C

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT - RED/BLUE BI-COLOR LED		
	COLOR	UNITS
	RED	BLUE
POWER DISSIPATION	100	200
PEAK FORWARD CURRENT (1/10 DUTY CYCLE, 10ms PULSE WIDTH)	100	200
CONTINUOUS FORWARD CURRENT	30	30
LINEAR DERATING FROM 80°C	1.0	0.50
LEAD REFLOW SOLDERING TEMPERATURE (FOR 5 SEC.)	260	°C
OPERATING TEMPERATURE	-40 TO +100	°C
STORAGE TEMPERATURE	-40 TO +100	°C

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT - RED/GRN/BLUE TRI-COLOR LED			
	RED	GREEN	BLUE
POWER DISSIPATION	72	120	120
CONTINUOUS FORWARD CURRENT	30	20	20
LINEAR DERATING FROM 80°C (*BLUE & GREEN FROM 70°C) 1 CHIP ON	1.00	*0.50	*0.50
LINEAR DERATING FROM 65°C (*BLUE & GREEN FROM 50°C) 3 CHIPS ON	0.75	*0.30	*0.30
LEAD REFLOW SOLDERING TEMPERATURE (FOR 5 SEC.)	260	°C	°C
OPERATING TEMPERATURE	-55 TO +100	°C	°C
STORAGE TEMPERATURE	-55 TO +100	°C	°C

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT - ORANGE/GREEN BI-COLOR LED		
	COLOR	UNITS
	ORANGE	GREEN
POWER DISSIPATION	95	95
PEAK FORWARD CURRENT (1/200 DUTY CYCLE, 10μs PULSE WIDTH)	500	500
CONTINUOUS FORWARD CURRENT	30	30
LINEAR DERATING FROM 55°C	0.66	0.66
LEAD REFLOW SOLDERING TEMPERATURE (FOR 5 SEC.)	260	°C
OPERATING TEMPERATURE	-40 TO +100	°C
STORAGE TEMPERATURE	-40 TO +100	°C

OPERATING CHARACTERISTICS AT 25°C AMBIENT - RED/GRN/BLUE TRI-COLOR LED					
#35	COLOR	LUMINOUS INTENSITY (mcd)	TEST CURRENT (mA)	DOMINANT WAVELENGTH (nm)	
				MIN	MAX
RED	RED	31	20	626	635
		84	20	525	523
		16	20	470	468

OPERATING CHARACTERISTICS AT 25°C AMBIENT - ORANGE/GREEN BI-COLOR LED					
#36	COLOR	LUMINOUS INTENSITY (mcd)	TEST CURRENT (mA)	DOMINANT WAVELENGTH (nm)	
				MIN	MAX
ORANGE	ORANGE	3	10	600	606
		4	10	564	570
		4	10	564	570

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT - SINGLE COLOR LEDs									
	RED [HI, EFF]	RED [AI(GaAs)]	GREEN	GREEN [HI, INT]	YELLOW	YELLOW [AlInGaP]	ORANGE	WHITE	BLUE [InGaP]
POWER DISSIPATION	95	90	95	95	95	80	95	80	100
PEAK FORWARD CURRENT (1/200 DUTY CYCLE, 10μs PULSE WIDTH)	500	500	500	500	500	200	500	200	200
CONTINUOUS FORWARD CURRENT	30	30	30	30	30	30	30	20	30
LINEAR DERATING FROM 60°C, UNLESS OTHERWISE NOTED	0.75	0.75	0.75	0.75	0.75	1.0 (FROM 85°C)	0.75	0.60 (FROM 75°C)	0.44 (FROM 55°C)
REVERSE VOLTAGE	12	5	12	12	5	12	5	5	5
LEAD REFLOW SOLDERING TEMPERATURE (FOR 5 SEC.)	260	°C	260	°C	260	°C	260	°C	260
OPERATING TEMPERATURE	-40 TO +100	°C	-40 TO +100	°C	-40 TO +100	°C	-40 TO +100	°C	-40 TO +100
STORAGE TEMPERATURE	-40 TO +100	°C	-40 TO +100	°C	-40 TO +100	°C	-40 TO +100	°C	-40 TO +100

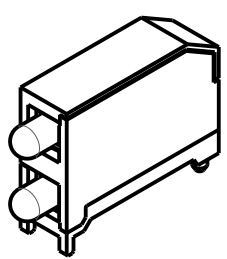
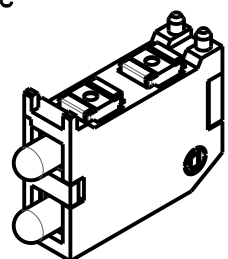
- NOTES :
- DIALIGHT PART NUMBERS: 592-XXXX-3XXF.
 - ...-302F SUFFIX MEANS PARTS ARE SUPPLIED ON A 10 PCS. SAMPLE STRIP
...-313F SUFFIX MEANS PARTS ARE SUPPLIED ON A 13 INCH REEL, 300 pcs/REEL
 - FRONT AND REAR TERMINALS (OF EACH LED) OF THE ASSEMBLY TO BE WITHIN .005" COPLANARITY.
 - STORAGE CONDITIONS FOR TAPED PRODUCT: RE-TAPING MAY BE NECESSARY FOR PRODUCT STORED MORE THAN TWELVE MONTHS.
 - PIN NUMBERS ARE FOR REFERENCE ONLY, DESIGNATION NON-EXISTENT ON PART.
 - MOISTURE SENSITIVITY LEVEL LABEL WILL BE PLACED ON BAG. CHECK CHART FOR PROPER LEVEL.
 - THIS ASSEMBLY CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES (ESDS). MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY, HANDLING, AND STORAGE IN ACCORDANCE WITH IPC-A-610.
 - FLAMMABILITY RATING
HOUSING: UL-94-VO
SILICONE LENS AND LED: UL-94HB

RoHS COMPLIANT 592-XXXX-3XXF

Part Numbers with the "F" suffix ending are RoHS Compliant.
For example: 592-2020-302F
Packaging is marked with "RoHS Compliant" label or equivalent markings. These parts can be used with RoHS reflow profile. Parts can be wave soldered, dip soldered or hand soldered using typical lead-free soldering process with max 260°C temp. for 5 sec.



ATTENTION:
OBSERVE PRECAUTIONS FOR
HANDLING ELECTROSTATIC
SENSITIVE DEVICES



SCALE 2.000

THIS DRAWING AND THE CONTENTS HEREIN
