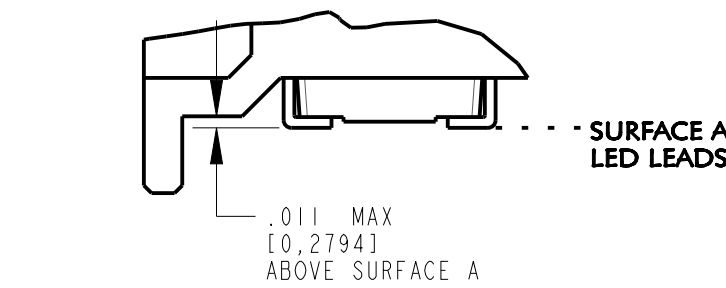
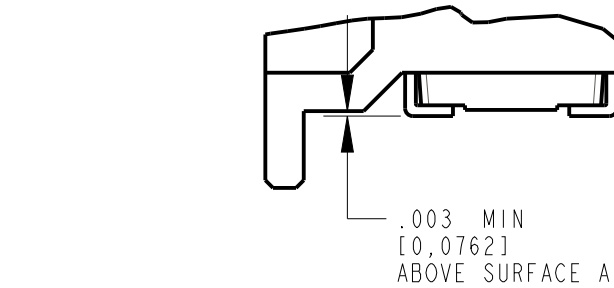
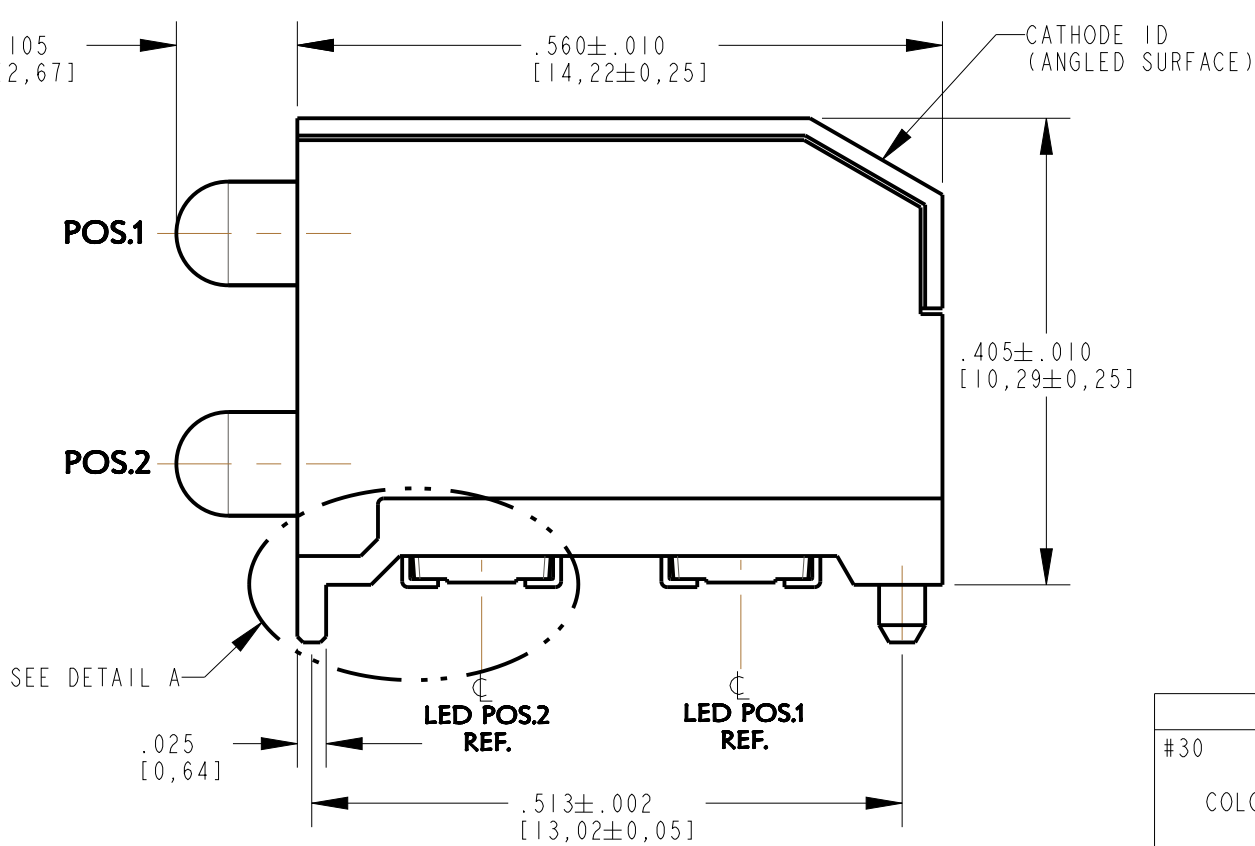
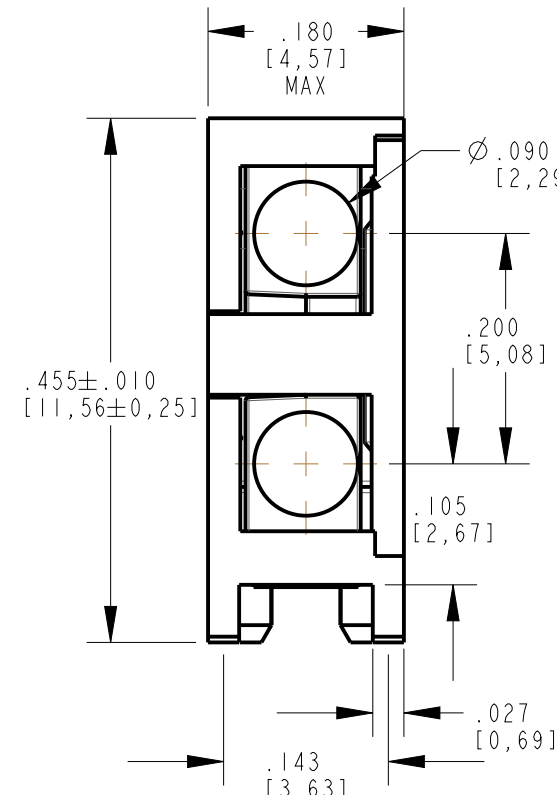


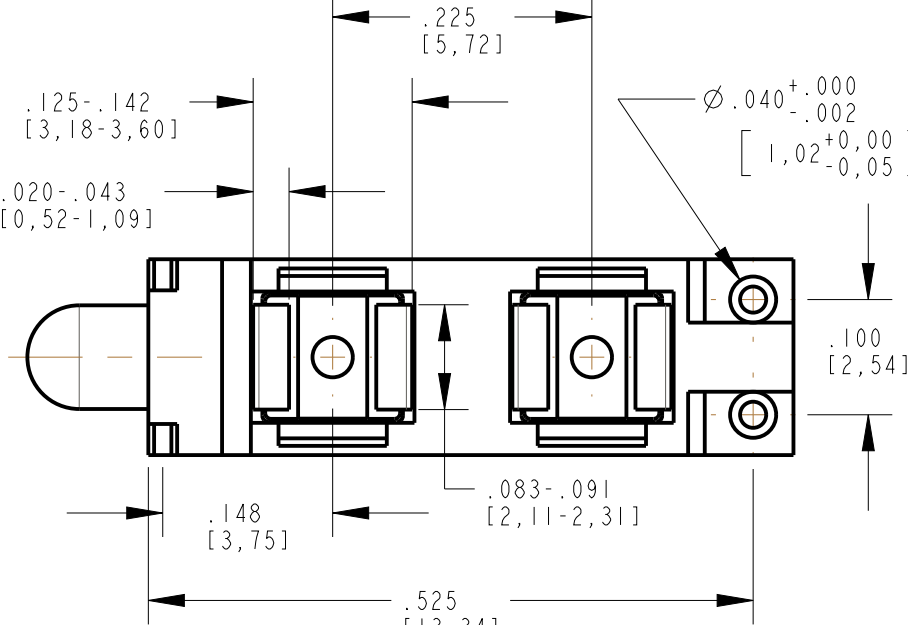
DIALIGHT PART NUMBER	PACKAGING	POSITION 1	POSITION 2	MSL
592-2020-302F	SAMPLE STRIP 13" REEL	RED [HI, EFF]	RED [HI, EFF]	2
592-2020-313F		RED [HI, EFF]	GREEN	2
592-2023-302F		RED [HI, EFF]	GREEN	2
592-2023-313F		RED [AI(GaAs)]	RED [AI(GaAs)]	2
592-2121-302F	SAMPLE STRIP 13" REEL	RED [AI(GaAs)]	RED [AI(GaAs)]	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

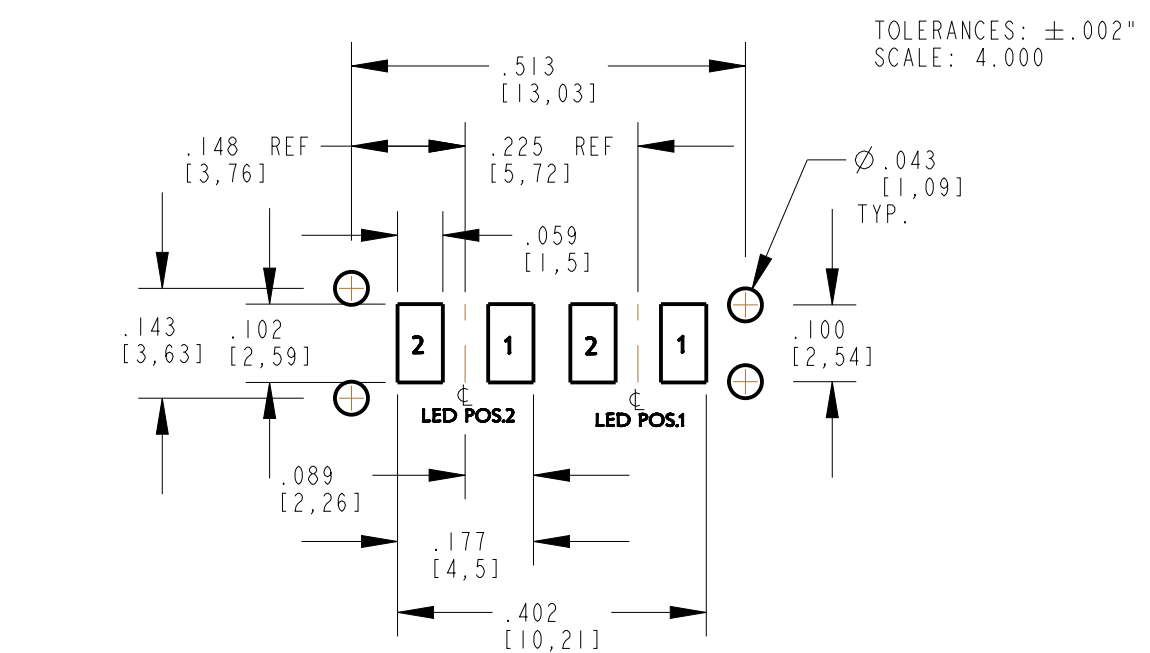


++SINGLE COLOR LED ASSEMBLY++



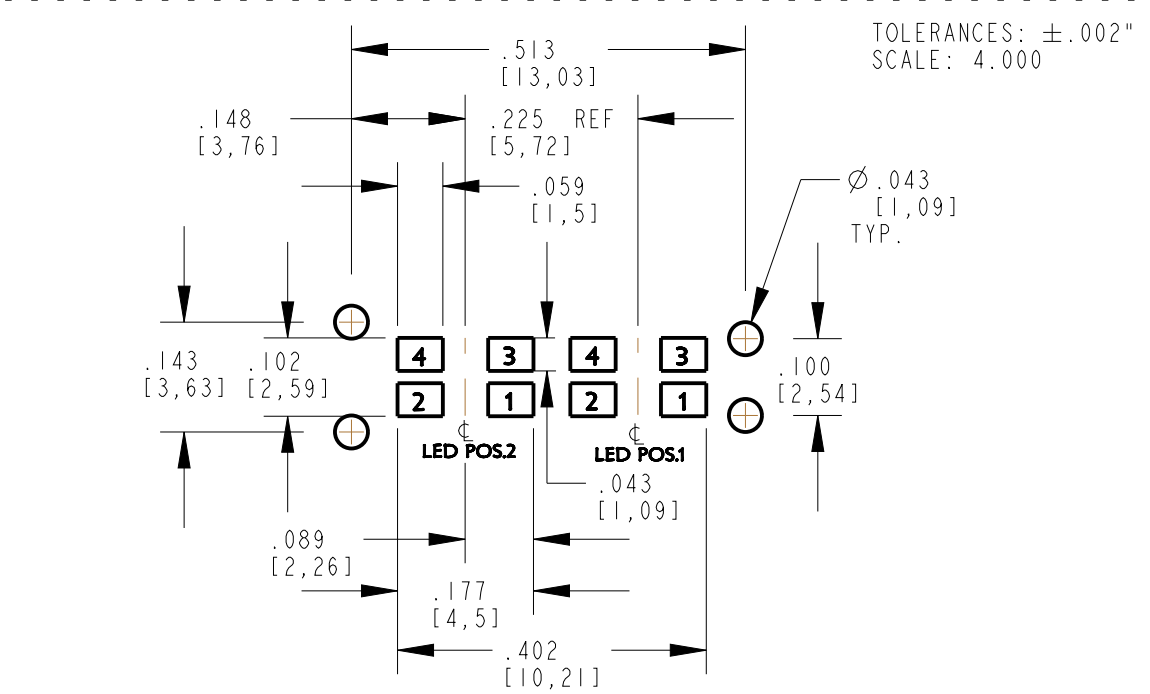
++BI-COLOR LED ASSEMBLY++

OPERATING CHARACTERISTICS AT 25°C AMBIENT - SINGLE COLOR LEDs										
COLOR		LUMINOUS INTENSITY (mcd)	TEST CURRENT (mA)	DOMINANT WAVELENGTH (nm)			PEAK WAVELENGTH (nm)	FORWARD VOLTAGE (V)		REVERSE CURRENT (μA)
#	DESCRIPTION	TYP		MIN	TYP	MAX	TYP	TYP	MAX	MAX
20	RED [HI, EFF]	3	10	622	628	634	635	2.0	2.5	10 @ V _R =12 V
21	RED [AlGaAs]	9	10	—	645	—	660	1.75	2.5	10 @ V _R =12 V
22	GREEN [HI, INT]	6	10	564	570	576	572	2.0	2.5	10 @ V _R =12 V
23	GREEN	4	10	564	570	576	572	2.0	2.5	10 @ V _R =12 V
24	YELLOW	2	10	580	587	595	586	2.0	2.5	10 @ V _R =5 V
25	ORANGE	2	10	600	606	609	610	2.0	2.5	10 @ V _R =5 V
26	BLUE [InGaP]	6	10	462	465	468	428	3.5	4.1	10 @ V _R =12 V
27	YELLOW [AlInGaP]	60	20	580	587	595	591	2.0	2.4	10 @ V _R =12 V
28	WHITE	34	10	X: .285; .33; .367 Y: .259; .33; .401			—	3.1	3.7	10 @ V _R =5 V
29	GREEN [InGaP]	56	20	—	525	—	523	3.7	4.3	10 @ V _R =12 V



TOLERANCES: ±.002"
SCALE: 4.000

RECOMMENDED PAD LAYOUT - SINGLE COLOR

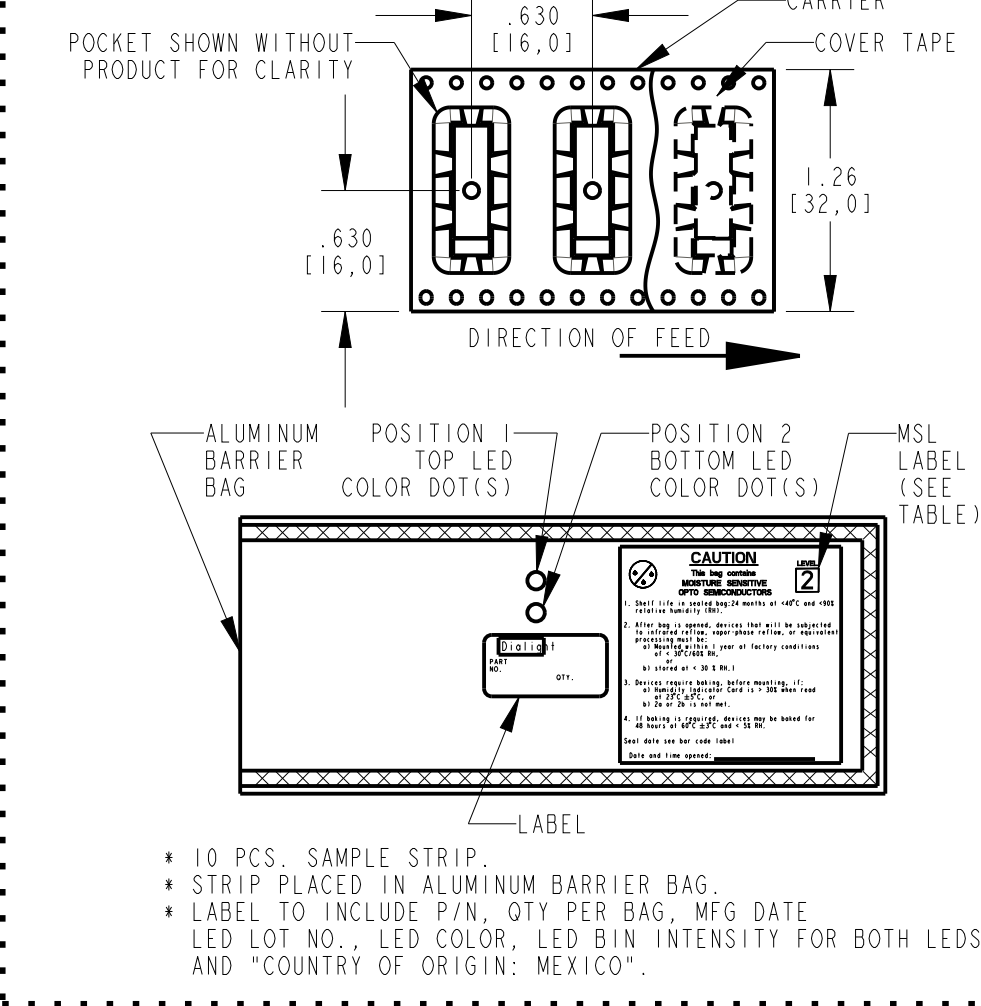


TOLERANCES: ±.002"
SCALE: 4.000

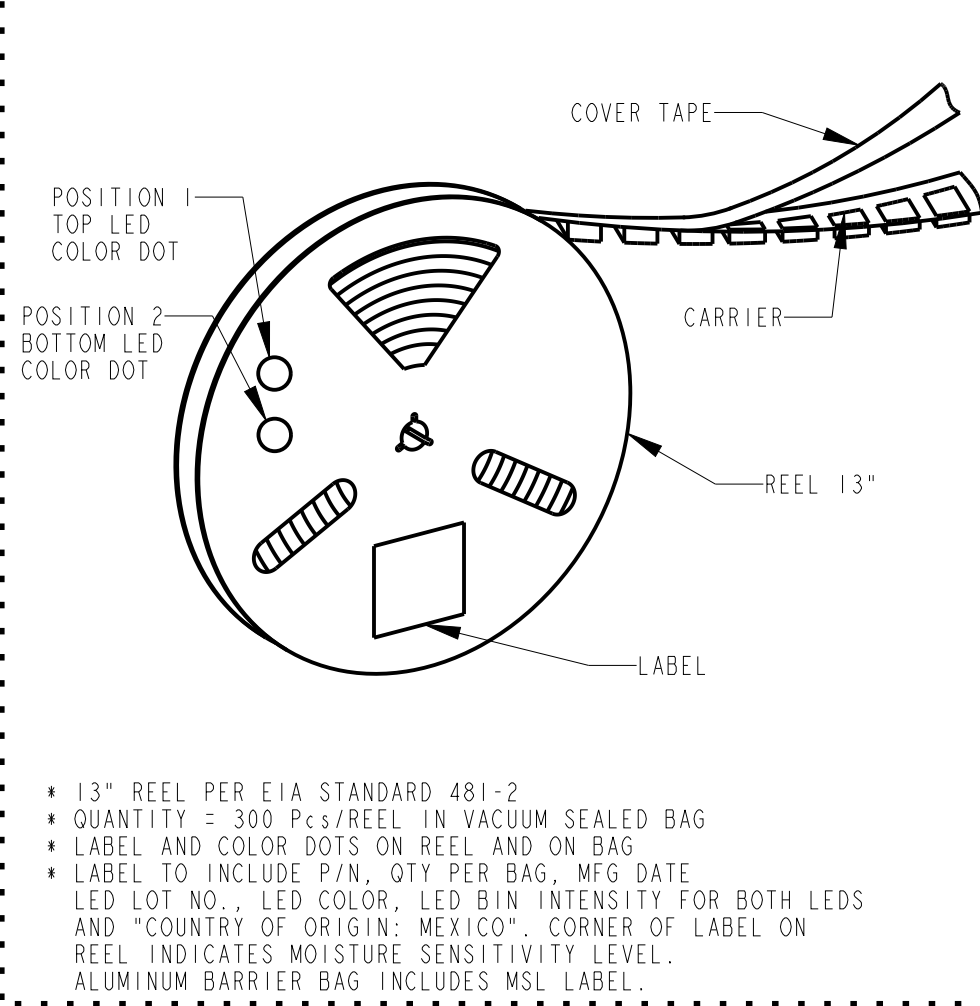
LED COLOR	PIN 1	PIN 2	PIN 3	PIN 4
RED/YELLOW	RED CATHODE	RED ANODE	YELLOW ANODE	YELLOW CATHODE
YELLOW/GREEN	YELLOW CATHODE	YELLOW ANODE	GREEN CATHODE	GREEN ANODE
RED/GREEN	RED CATHODE	RED ANODE	GREEN CATHODE	GREEN ANODE
RED/BLUE	RED CATHODE	RED ANODE	BLUE CATHODE	BLUE ANODE
ORANGE/GREEN	ORANGE CATHODE	ORANGE ANODE	GREEN CATHODE	GREEN ANODE
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

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT - RED/GREEN BI-COLOR LED

	COLOR		UNITS
	RED	GREEN	
POWER DISSIPATION	95	95	mW
PEAK FORWARD CURRENT (1/200 DUTY CYCLE, 10μs PULSE WIDTH)	500	500	mA
CONTINUOUS FORWARD CURRENT	30	30	mA
LINEAR DERATING FROM 55°C	0.66	0.66	mA/°C
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	mW
PEAK FORWARD CURRENT (1/200 DUTY CYCLE, 10μs PULSE WIDTH)	500	500	mA
CONTINUOUS FORWARD CURRENT	30	30	mA
LINEAR DERATING FROM 55°C	0.66	0.66	mA/°C
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	mW
PEAK FORWARD CURRENT (1/200 DUTY CYCLE, 10μs PULSE WIDTH)	1000	200	mA
CONTINUOUS FORWARD CURRENT	30	30	mA
LINEAR DERATING FROM 75°C	0.60	0.60	mA/°C
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		mW
PEAK FORWARD CURRENT (1/10 DUTY CYCLE, 10ms PULSE WIDTH)	100		mA
CONTINUOUS FORWARD CURRENT	30		mA
LINEAR DERATING FROM 80°C	1.0		mA/°C
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

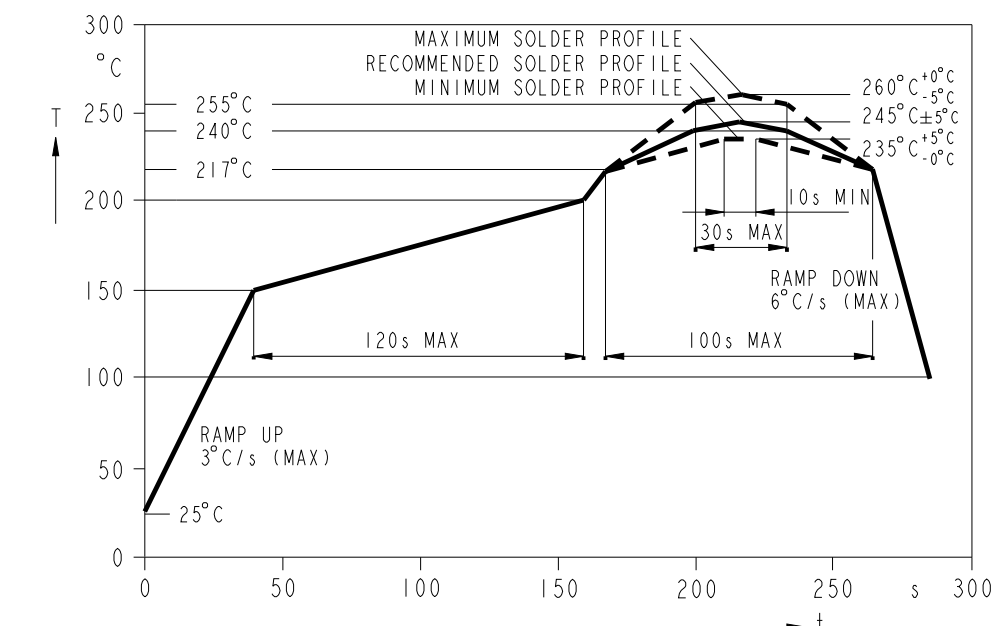
	COLOR			UNITS
	RED	GREEN	BLUE	
POWER DISSIPATION	72	120	120	mW
CONTINUOUS FORWARD CURRENT	30	20	20	mA
LINEAR DERATING FROM 80°C (*BLUE & GREEN FROM 70°C) 1 CHIP ON	1.00	*0.50	*0.50	mA/°C
LINEAR DERATING FROM 65°C (*BLUE & GREEN FROM 50°C) 3 CHIPS ON	0.75	*0.30	*0.30	mA/°C
LEAD REFLOW SOLDERING TEMPERATURE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

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT - ORANGE/GREEN BI-COLOR LED

	COLOR		UNITS
	ORANGE	GREEN	
POWER DISSIPATION	95	95	mW
PEAK FORWARD CURRENT (1/200 DUTY CYCLE, 10μs PULSE WIDTH)	500	500	mA
CONTINUOUS FORWARD CURRENT	30	30	mA
LINEAR DERATING FROM 55°C	0.66	0.66	mA/°C
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 - SINGLE COLOR LEDs

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT - SINGLE COLOR LEDs											UNITS	
	RED [H _I , EFF]	RED [AlGaAs]	GREEN	GREEN [H _I , INT]	YELLOW	YELLOW [AlInGaP]	ORANGE	WHITE	BLUE [InGaN]	GREEN [InGaN]		
POWER DISSIPATION	95	90	95	95	95	80	95	80	100	114	mW	
PEAK FORWARD CURRENT (1/200 DUTY CYCLE, 10μs PULSE WIDTH)	500	500	500	500	500	200	500	200	200	200	mA	
CONTINUOUS FORWARD CURRENT	30	30	30	30	30	30	30	20	20	30	mA	
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)	0.42 (FROM 40°C)	mA/°C	
REVERSE VOLTAGE	12	5	12	12	5	12	5	5	5	5	V	
LEAD REFLOW SOLDERING TEMPERATURE (FOR 5 SEC.)	260										°C	
OPERATING TEMPERATURE											-55 TO +100	°C
STORAGE TEMPERATURE											-55 TO +100	°C



RECOMMENDED RoHS COMPLIANT
REFLOW PROFILE

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-