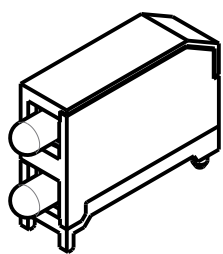
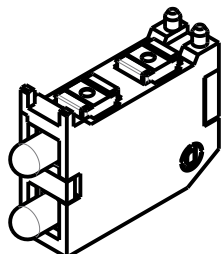


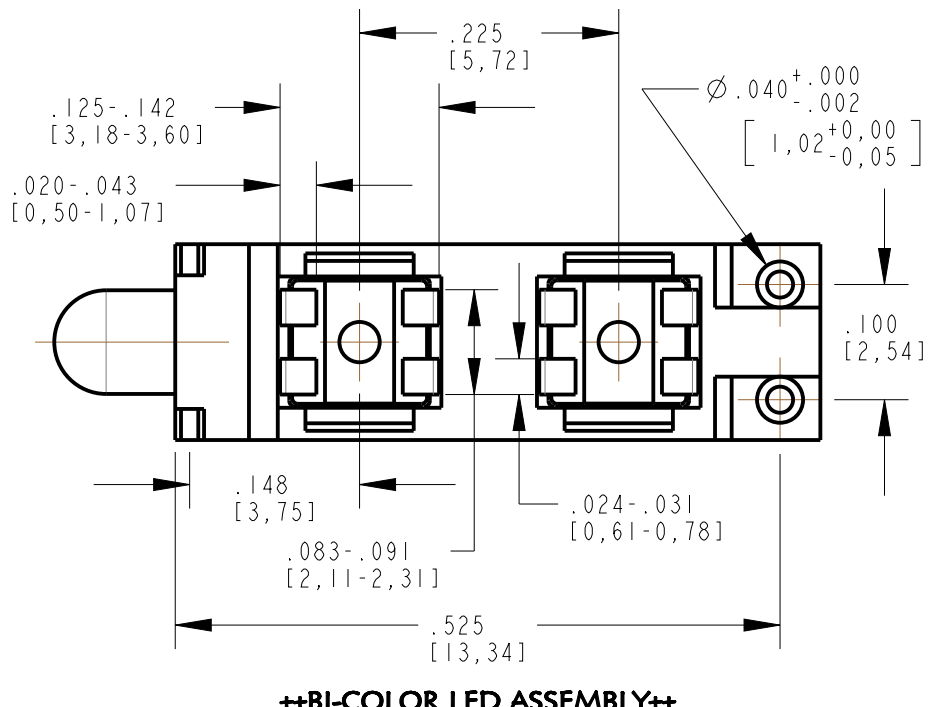
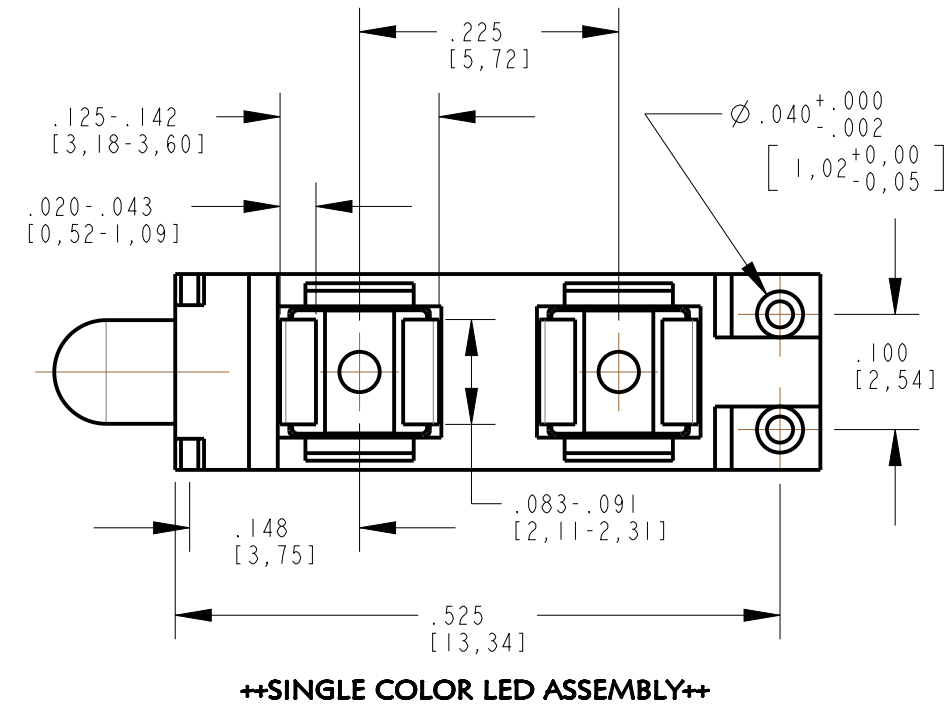
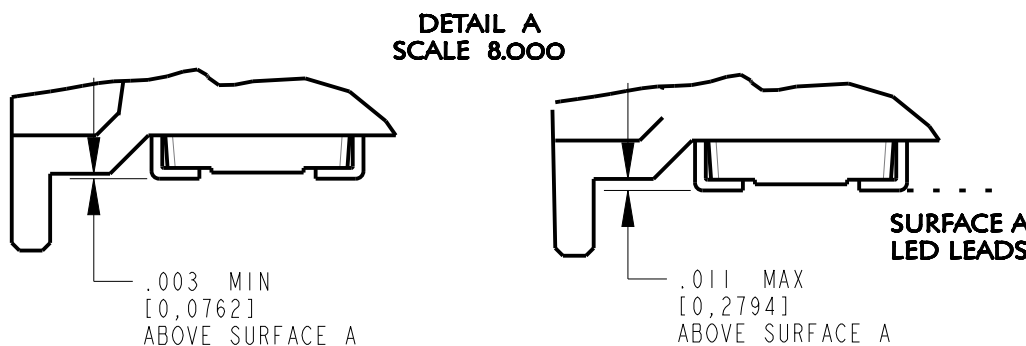
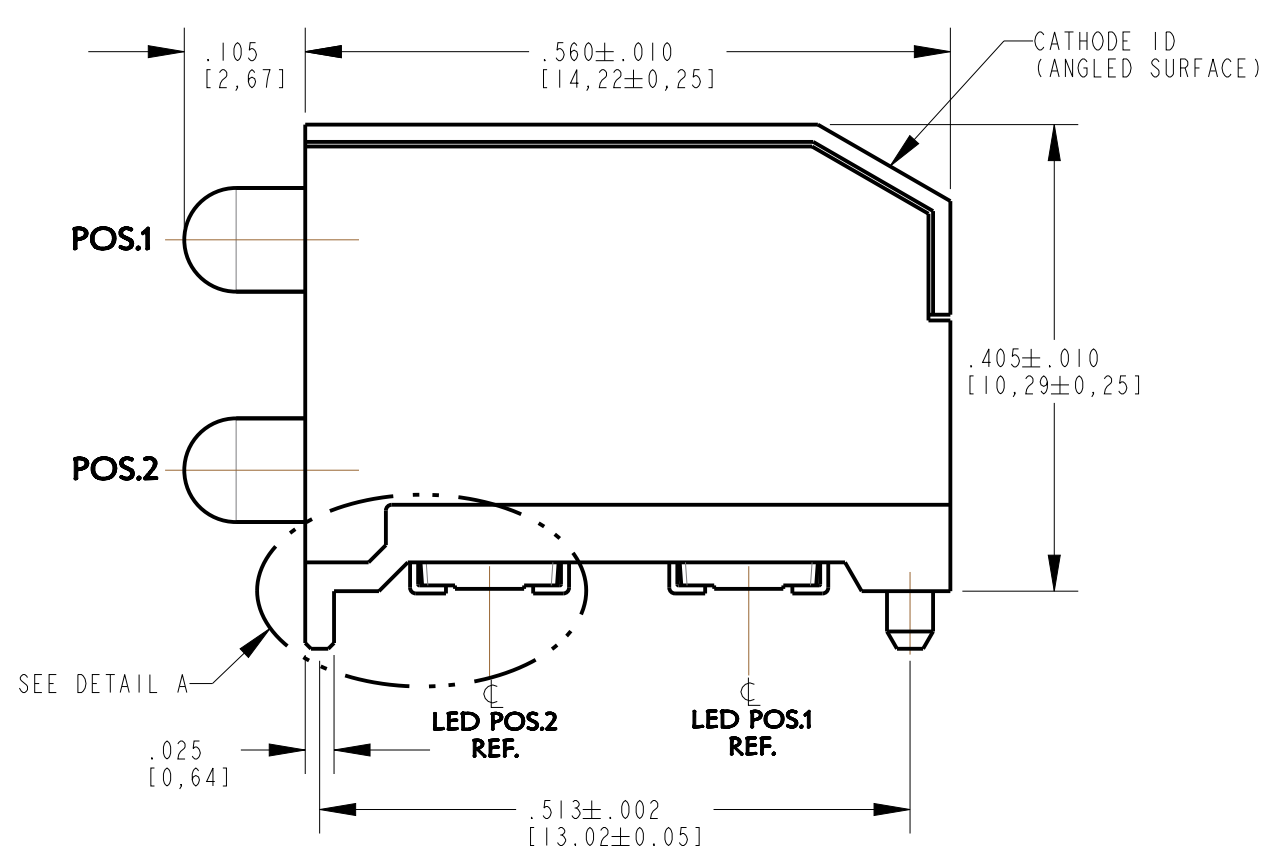
DIALIGHT PART NUMBER	PACKAGING	POSITION 1	POSITION 2	MSL
592-1010-302F	SAMPLE STRIP 13" REEL	RED [2mA]	RED [2mA]	2
592-1010-313F		GREEN [2mA]	GREEN [2mA]	2
592-1313-302F		GREEN [2mA]	YELLOW [2mA]	2
592-1313-313F		GREEN [2mA]	RED [2mA]	2
592-1410-302F	SAMPLE STRIP 13" REEL	YELLOW [2mA]	RED [2mA]	2
592-1410-313F		YELLOW [2mA]	YELLOW [2mA]	2
592-1414-302F		ORANGE [2mA]	ORANGE [2mA]	2
592-1515-313F		RED [2mA]	RED [2mA]	2
592-2020-302F	SAMPLE STRIP 13" REEL	[HI.EFF]	[HI.EFF]	2
592-2020-313F		[HI.EFF]	GREEN	2
592-2023-302F		RED [AI(GaAs)]	RED [AI(GaAs)]	2
592-2023-313F		RED [AI(GaAs)]	YELLOW	2
592-2121-302F	SAMPLE STRIP 13" REEL	RED [AI(GaAs)]	BLUE [InGaN]	2
592-2124-302F		RED [AI(GaAs)]	RED/GRN/BLUE	2a
592-2126-302F		GREEN [HI.INT]	GREEN [HI.INT]	2
592-2126-313F		GREEN [HI.INT]	GREEN [HI.EFF]	2
592-2222-302F	SAMPLE STRIP 13" REEL	GREEN	GREEN	2
592-2222-313F		GREEN	YELLOW	2
592-2326-302F		GREEN	BLUE [InGaN]	2
592-2326-313F		GREEN	RED [HI.EFF]	2
592-2420-302F	SAMPLE STRIP 13" REEL	YELLOW	RED [HI.EFF]	2
592-2420-313F		YELLOW	GREEN [HI.INT]	2
592-2422-302F		YELLOW	GREEN [InGaN]	2
592-2422-313F		YELLOW	ORANGE/GREEN	2
592-2423-302F	SAMPLE STRIP 13" REEL	YELLOW	GREEN	2
592-2424-302F		YELLOW	YELLOW	2
592-2424-313F		YELLOW	BLUE [InGaN]	2
592-2429-302F		YELLOW	ORANGE	2
592-2436-302F	SAMPLE STRIP 13" REEL	ORANGE	ORANGE	2
592-2525-302F		ORANGE	BLUE [InGaN]	2
592-2525-313F		ORANGE	WHITE	2
592-2626-302F		BLUE [InGaN]	YELLOW/GREEN	2
592-2626-313F	SAMPLE STRIP 13" REEL	BLUE [InGaN]	WHITE	2
592-2627-302F		BLUE [InGaN]	YELLOW	2
592-2627-313F		BLUE [InGaN]	WHITE	2
592-2628-302F		BLUE [InGaN]	YELLOW/GREEN	2
592-2628-313F	SAMPLE STRIP 13" REEL	BLUE [InGaN]	YELLOW	2
592-2631-302F		YELLOW [AlInGaP]	YELLOW [AlInGaP]	2
592-2727-302F		YELLOW [AlInGaP]	GREEN [InGaN]	2a
592-2729-302F		YELLOW [AlInGaP]	BLUE [InGaN]	2
592-2826-302F	SAMPLE STRIP 13" REEL	WHITE	WHITE	2
592-2826-313F		TRUE GREEN [InGaN]	BLUE [InGaN]	2a
592-2926-302F		GREEN [InGaN]	YELLOW [AlInGaP]	2a
592-2927-302F		GREEN [InGaN]	YELLOW	2
592-3024-302F	SAMPLE STRIP 13" REEL	RED/GREEN	YELLOW	2
592-3024-313F		GREEN [InGaN]	GREEN [InGaN]	2a
592-3030-302F		RED/GREEN	RED/GREEN	2
592-3030-313F		RED/GREEN	YELLOW/GREEN	2
592-3031-302F	SAMPLE STRIP 13" REEL	RED/GREEN	RED/YELLOW	2
592-3031-313F		RED/GREEN	RED/BLUE	2a
592-3032-302F		RED/GREEN	ORANGE/GREEN	3
592-3032-313F		YELLOW/GREEN	BLUE [InGaN]	2
592-3131-302F	SAMPLE STRIP 13" REEL	YELLOW/GREEN	YELLOW/GREEN	2
592-3131-313F		RED/YELLOW	RED/YELLOW	2
592-3232-302F		RED/YELLOW	ORANGE/GREEN	2
592-3232-313F		RED/GRN/BLUE	RED	2a
592-3236-302F	SAMPLE STRIP 13" REEL	RED/GRN/BLUE	WHITE	2a
592-3236-313F		RED/GRN/BLUE	RED/GREEN	2a
592-3531-302F		RED/GRN/BLUE	YELLOW/GREEN	2a
592-3531-313F		RED/GRN/BLUE	RED/GRN/BLUE	2a

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-V0
SILICONE LENS AND LED: UL-94HB



SCALE: 2.000



OPERATING CHARACTERISTICS AT 25°C AMBIENT - SINGLE COLOR LEDs									
#	DESCRIPTION	LUMINOUS INTENSITY (mcd)		DOMINANT WAVELENGTH (nm)			PEAK WAVELENGTH (nm)		REVERSE CURRENT (μA)
		2mA	10mA	MIN	TYP	MAX	TYP	MAX	
10	RED	3.8	9.8	624	630	636	643	1.8	2.2
13	GREEN	3.2	10.1	566	570	575	572	1.8	2.2
14	YELLOW	4.4	11.3	580	587	594	591	1.8	2.2
15	ORANGE	5.6	14.0	600	606	609	610	1.8	2.2

OPERATING CHARACTERISTICS AT 25°C AMBIENT - SINGLE COLOR LEDs									
#	DESCRIPTION	TYP	TEST CURRENT (mA)			DOMINANT WAVELENGTH (nm)			REVERSE CURRENT (μA)
			MIN	TYP	MAX	TYP	TYP	MAX	
20	RED [HI.EFF]	3	10	622	628	634	635	2.0	2.5
21	RED [AI(GaAs)]	9	10	—	645	—	660	1.75	2.5
22	GREEN [HI.INT]	6	10	564	570	576	572	2.0	2.5
23	GREEN	4	10	564	570	576	572	2.0	2.5
24	YELLOW	2	10	580	587	595	586	2.0	2.5
25	ORANGE	2	10	600	606	609	610	2.0	2.5
26	BLUE [InGaN]	6	10	462	465	468	428	3.5	4.1
27	YELLOW [AlInGaP]	60	20	580	587	595	591	2.0	2.4
28	WHITE	34	10	X= .285; Y= .259; Z= .367	33; .387	367	—	3.1	3.7
29	GREEN [InGaN]	56	20	—	525	—	523	3.7	4.3

#30 & #31 OPERATING CHARACTERISTICS AT 25°C AMBIENT									
LED COLOR	LUMINOUS INTENSITY (mcd)	FORWARD VOLTAGE (V)		REVERSE CURRENT (μA)			DOMINANT WAVELENGTH (nm)		
		MIN	TYP	MAX	TYP	MAX	MIN	TYP	MAX
RED/GRN	RED	—	11	—	1.8	2.2	0.01	10	624
RED/GRN	GREEN	—	5	—	1.8	2.2	0.01	10	566
Ylw/GRN	YELLOW	—	14	—	1.8	2.2	0.01	10	580
Ylw/GRN	GREEN	—	5	—	1.8	2.2	0.01	10	566

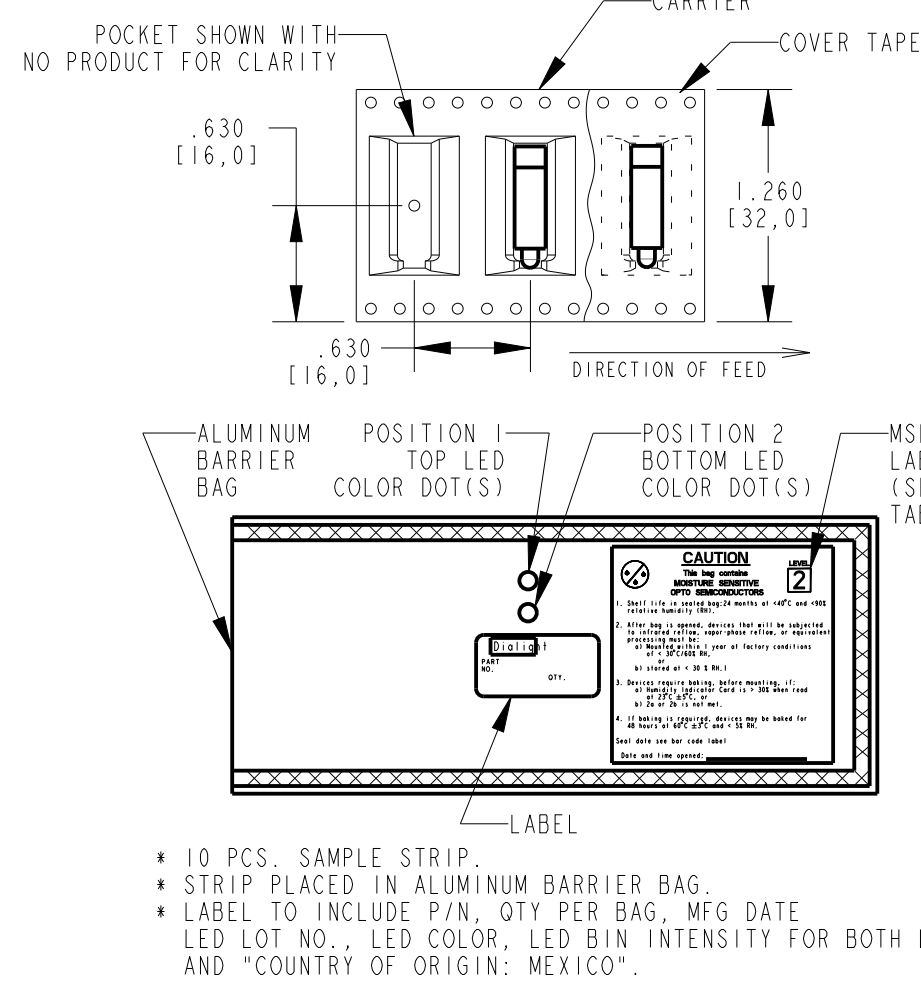
OPERATING CHARACTERISTICS AT 25°C AMBIENT - RED/YELLOW BI-COLOR LED									
#32	COLOR	LUMINOUS INTENSITY (mcd)	TEST CURRENT (mA)	DOMINANT WAVELENGTH (nm)			PEAK WAVELENGTH (nm)		FORWARD VOLTAGE (V)
				MIN	TYP	MAX	TYP	MAX	
RED	RED	21	20	627	633	639	645	2.0	2.3
	YELLOW	34	20	580	587	595	591	2.0	2.4

OPERATING CHARACTERISTICS AT 25°C AMBIENT - RED/BLUE BI-COLOR LED									
#34	COLOR	LUMINOUS INTENSITY (mcd)	TEST CURRENT (mA)	DOMINANT WAVELENGTH (nm)			PEAK WAVELENGTH (nm)		FORWARD VOLTAGE (V)
				MIN	TYP	MAX	TYP	MAX	
RED	RED	21	10	620	625	630	—	1.9	2.2
	BLUE	24	10	465	467	470	—	3.0	3.2

OPERATING CHARACTERISTICS AT 25 °C AMBIENT - RED/GRN/BLUE TRI-COLOR LED									
#35	COLOR	LUMINOUS INTENSITY (mcd)	TEST CURRENT (mA)	DOMINANT WAVELENGTH (nm)			PEAK WAVELENGTH (nm)		FORWARD VOLTAGE (V)
				MIN	TYP	MAX	TYP	MAX	
	RED	31	20	626			635	1.9	2.4
	GREEN	84	20	525			523	3.4	4.1
	BLUE	16	20	470			468	3.4	4.1

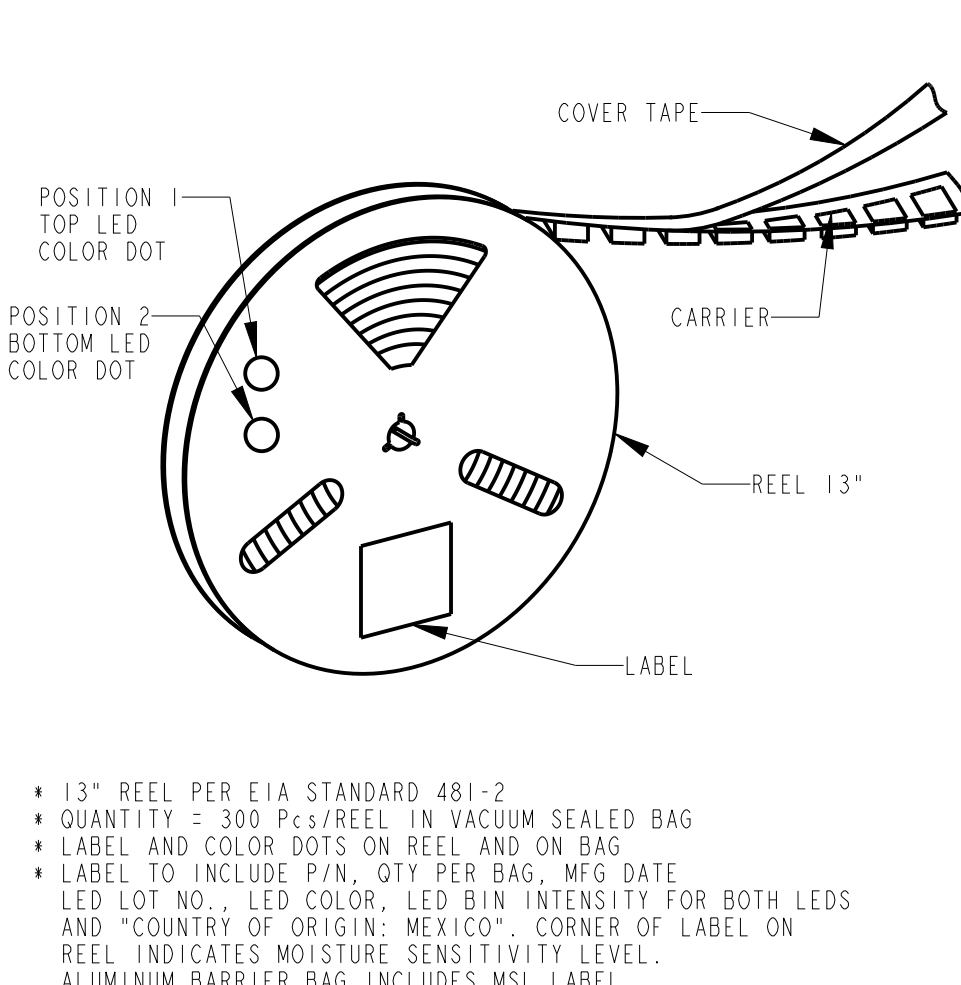
OPERATING CHARACTERISTICS AT 25°C AMBIENT - ORANGE/GREEN BI-COLOR LED									
#36	COLOR	LUMINOUS INTENSITY (mcd)	TEST CURRENT (mA)	DOMINANT WAVELENGTH (nm)			PEAK WAVELENGTH (nm)		FORWARD VOLTAGE (V)
				MIN	TYP	MAX	TYP	MAX	
ORANGE	ORANGE	3	10	600	606	612	610	2.0	2.5
	GREEN	4	10	564	570	576	572	2.0	2.5

SAMPLE STRIP PACKAGING SPECIFICATION



- 10 PCS. SAMPLE STRIP.
- STRIP PLACED IN ALUMINUM BARRIER BAG.
- LABEL TO INCLUDE P/N, QTY PER BAG, MFG DATE, LED LOT NO., LED COLOR, LED BIN INTENSITY FOR BOTH LEADS AND "COUNTRY OF ORIGIN: MEXICO".
- ALUMINUM BARRIER BAG INCLUDES MSL LABEL.

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 LEADS 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 - SINGLE COLOR LEDs	COLOR				UNITS
	RED	GREEN	YELLOW	ORANGE	
POWER DISSIPATION	50	40	50	50	mW
PEAK FORWARD CURRENT (1/200 DUTY CYCLE, 10μs PULSE WIDTH)	100	100	100	100	mA
CONTINUOUS FORWARD CURRENT	20	20	20	20	mA
LINEAR DERATING AT MAX CURRENT (20mA)	0 (UNDER 100°C)	0 (UNDER 100°C)	0 (UNDER 100°C)	0 (UNDER 100°C)	mA/°C
REVERSE VOLTAGE	12	12	12	12	V
LEAD REFLOW SOLDERING TEMPERATURE (FOR 5 SEC.)	260 (ALSO SEE GRAPH)	260 (ALSO SEE GRAPH)	260 (ALSO SEE GRAPH)	260 (ALSO SEE GRAPH)	°C
OPERATING TEMPERATURE	-40 TO +100	-40 TO +100	-40 TO +100	-40 TO +100	°C
STORAGE TEMPERATURE	-40 TO +100	-40 TO +100	-40 TO +100	-40 TO +100	°C

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT SINGLE COLOR LEDs	COLOR										UNITS
	RED [HI.EFF]	RED [AI(GaAs)]	GREEN	GREEN [HI.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 TEMP (FOR 5 SEC.)	260	260	260	260	260	260	260	260	260	260	°C
OPERATING TEMPERATURE	-40 TO +100	-40 TO +100	-40 TO +100	-40 TO +100	-40 TO +100	-40 TO +100	-40 TO +100	-40 TO +100	-40 TO +100	-40 TO +100	°C
STORAGE TEMPERATURE	-40 TO +100	-40 TO +100	-40 TO +100	-40 TO +100	-40 TO +100	-40 TO +100	-40 TO +100	-40 TO +100	-40 TO +100	-40 TO +100	°C

ABSOLUTE MAXIMUM RATINGS AT 25 °C AMBIENT RED/GRN & YLW/GRN BI-COLOR LED	RED/GRN	YLW/GRN	UNITS
INOUE FORWARD CURRENT		15	mA
RSE VOLTAGE		12	V
E CURRENT		100	mA
SOLDERING TEMPERATURE		245	°C
ATING TEMPERATURE	-40 TO +100		°C
AGE TEMPERATURE	-40 TO +100		°C