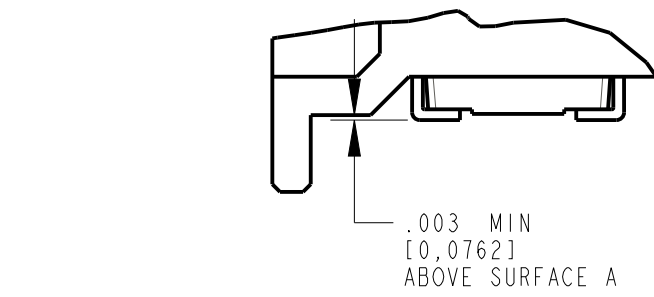
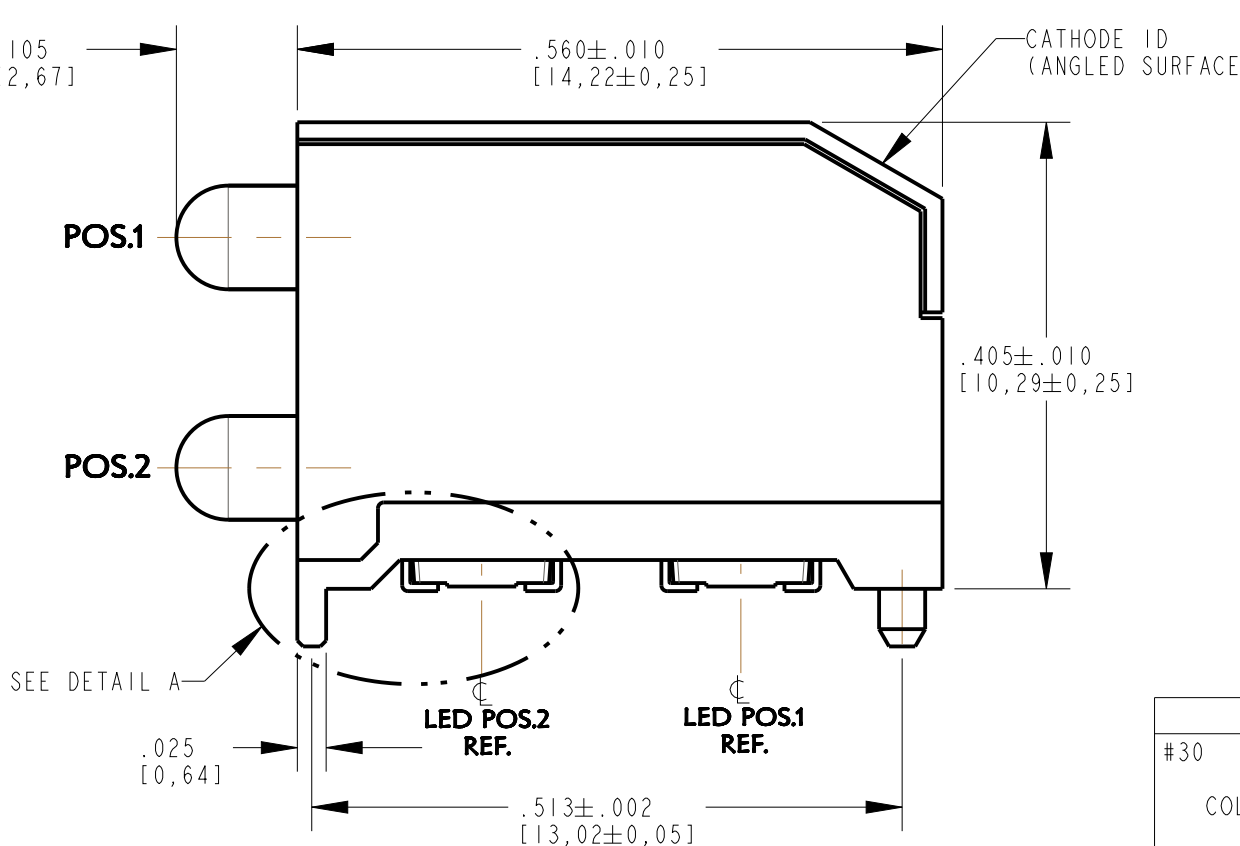
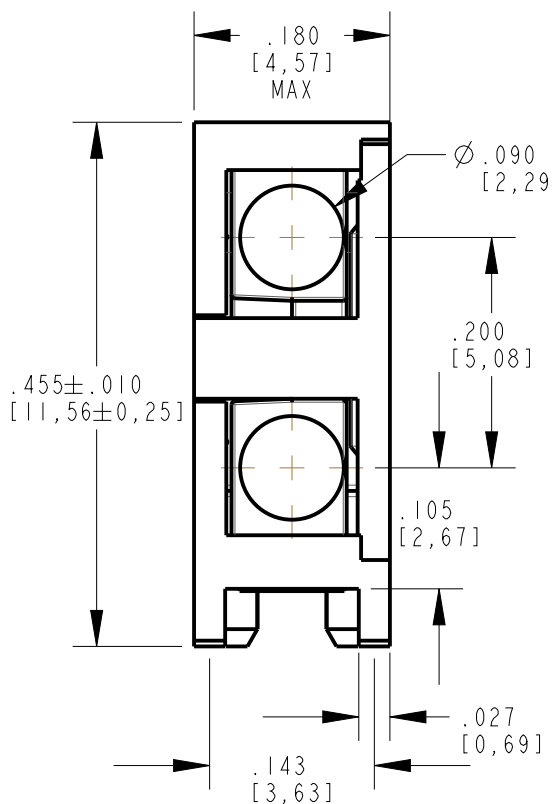


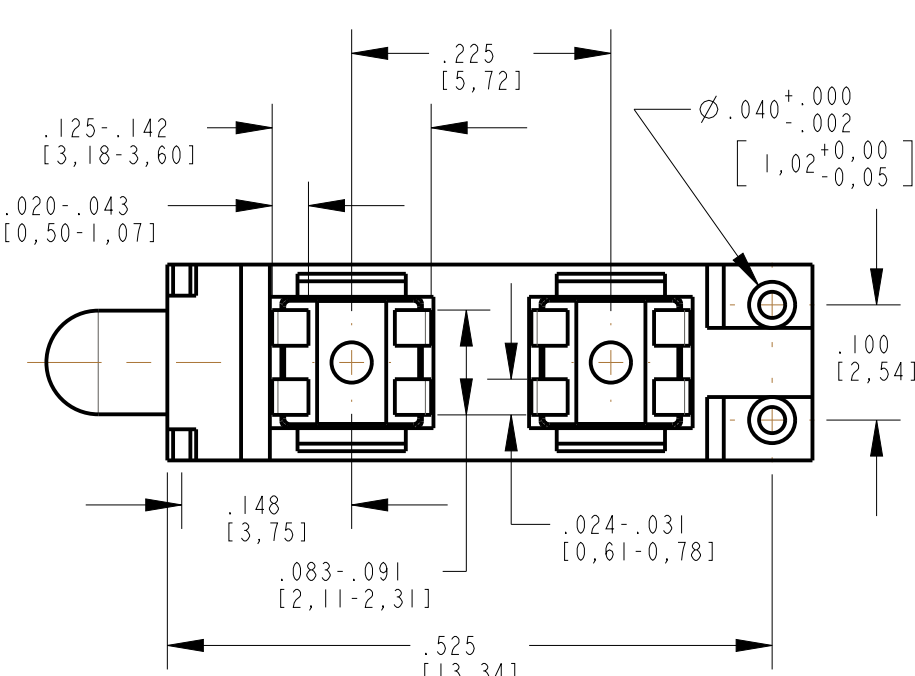
DIALIGHT PART NUMBER	PACKAGING	POSITION 1	POSITION 2	MSL
592-2020-302F	SAMPLE STRIP 13" REEL	RED [HI, EFF]	RED [HI, EFF]	2
592-2020-313F		RED [HI, EFF]	GREEN	2
592-2023-302F		RED [HI, EFF]	GREEN	2
592-2023-313F		RED [AI(GaAs)]	RED [AI(GaAs)]	2
592-2121-302F	SAMPLE STRIP 13" REEL	RED [AI(GaAs)]	RED [AI(GaAs)]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



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 [InGaN]	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 [InGaN]	56	20	—	525	—	523	3.7	4.3	10 @ V _R =12 V

TOLERANCES: ±.002"
SCALE: 4.000

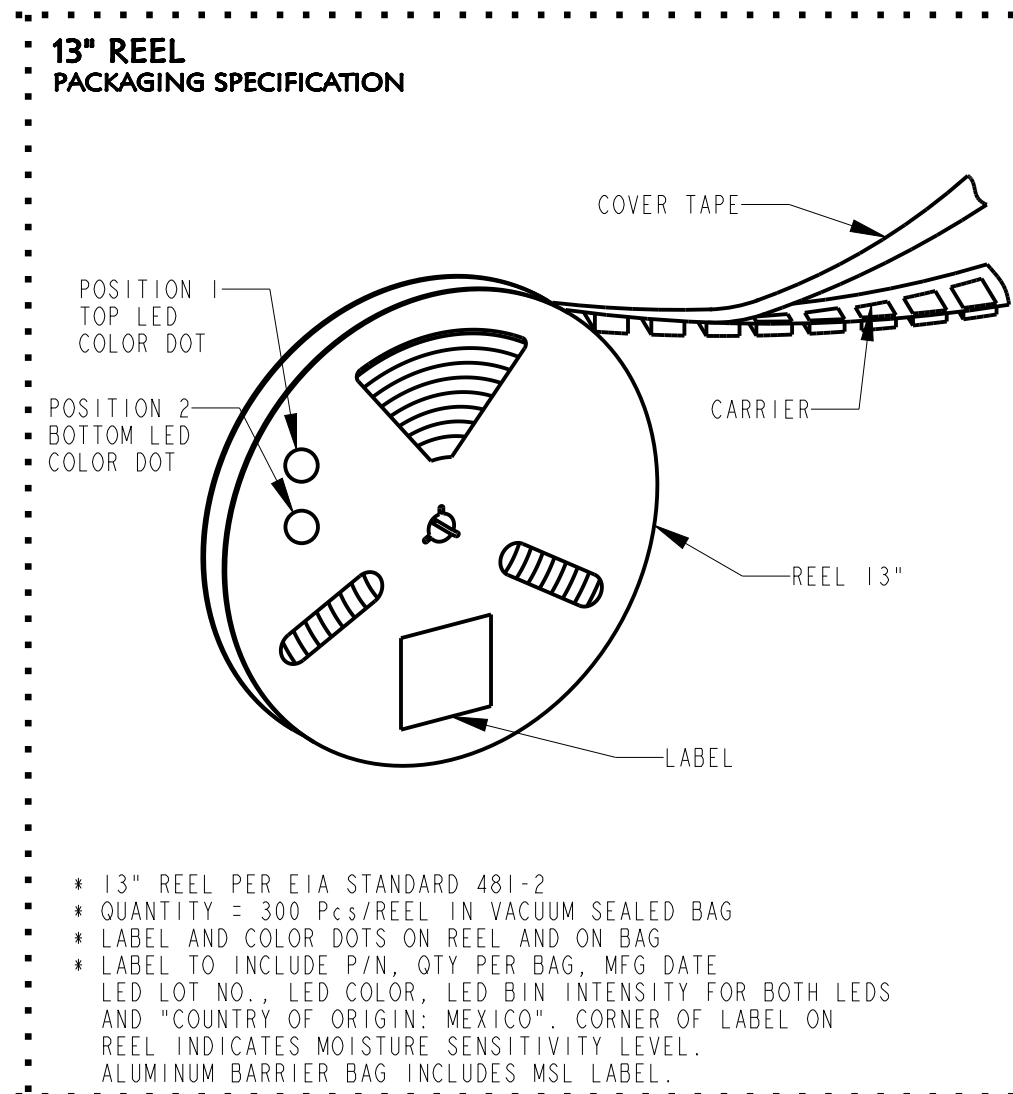
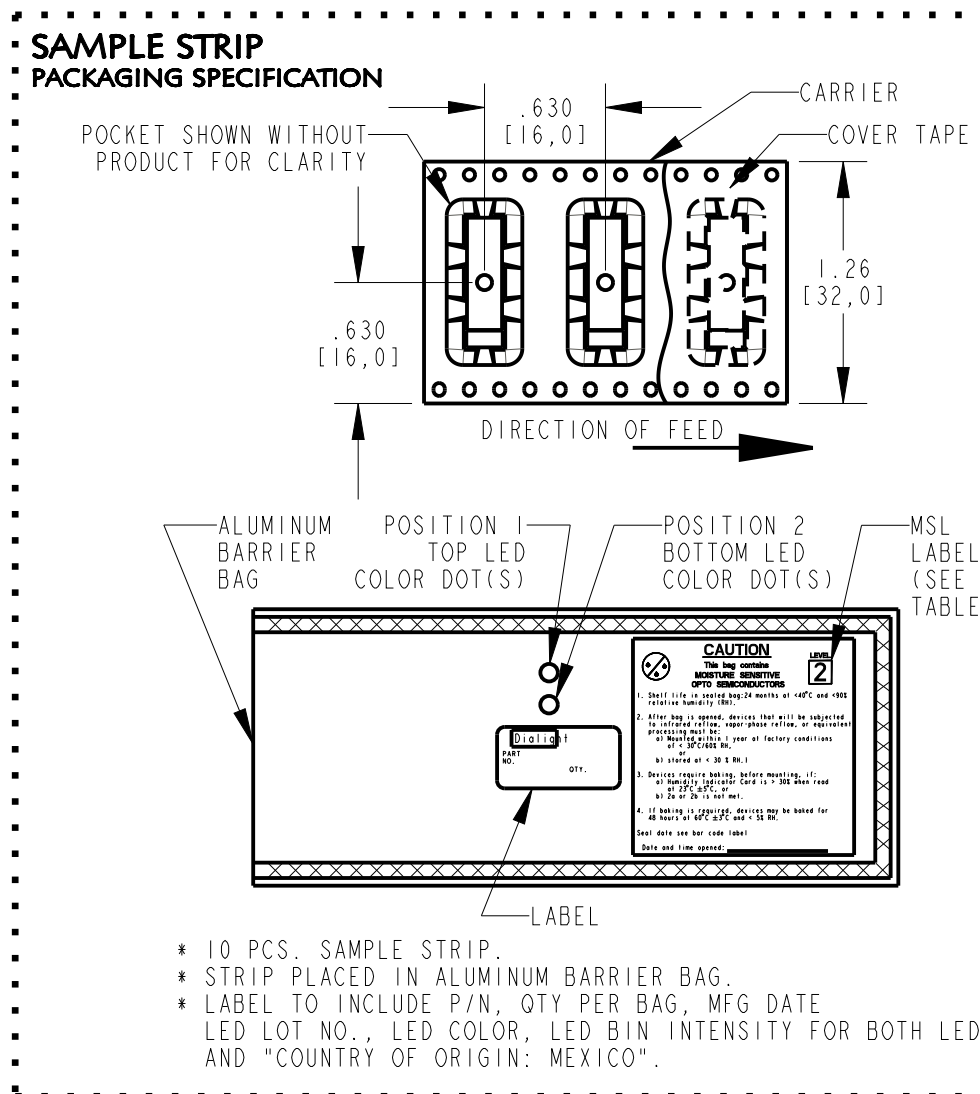
TOLERANCES: ±.002"
SCALE: 4.000

LED COLOR	PIN 1	PIN 2
SINGLE COLOR	CATHODE	ANODE

RECOMMENDED PAD LAYOUT - SINGLE COLOR

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 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



OPERATING CHARACTERISTICS AT 25°C AMBIENT - RED/GREEN BI-COLOR LED										
#30	COLOR	LUMINOUS INTENSITY (mcd)	TEST CURRENT (mA)	DOMINANT WAVELENGTH (nm)			PEAK WAVELENGTH (nm)		FORWARD VOLTAGE (V)	
				MIN	TYP	MAX	TYP		TYP	MAX
				TYP				TYP		TYP
RED		3	10	622	628	634	635	2.0	2.5	
GREEN		4	10	564	570	576	572	2.0	2.5	

OPERATING CHARACTERISTICS AT 25°C AMBIENT - YELLOW/GREEN BI-COLOR LED									
#31	COLOR	LUMINOUS INTENSITY (mcd)	TEST CURRENT (mA)	DOMINANT WAVELENGTH (nm)			PEAK WAVELENGTH (nm)	FORWARD VOLTAGE (V)	
				MIN	TYP	MAX	TYP	TYP	MAX
		TYP							
	YELLOW	2	10	584	590	596	587	2.0	2.5
	GREEN	3	10	564	570	576	572	2.0	2.5

OPERATING CHARACTERISTICS AT 25° C AMBIENT - RED/YELLOW BI-COLOR LED								
#32	COLOR	LUMINOUS INTENSITY (m.c.d)	TEST CURRENT (mA)	DOMINANT WAVELENGTH (nm)			PEAK WAVELENGTH (nm)	FORWARD VOLTAGE (V)
		TYP		MIN	TYP	MAX	TYP	TYP
	RED	21	20	627	633	639	645	2.0
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)	
		TYP		MIN	TYP	MAX	TYP	TYP	MAX
	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)	
		TYP		MIN	TYP	MAX	TYP	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 VOLT (V)	
				MIN	TYP	MAX	TYP	TYP	MA
		TYP							
ORANGE		3	10	600	606	612	610	2.0	2.0
GREEN		4	10	564	570	576	572	2.0	2.0

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT - SINGLE COLOR LEDs									
	RED [HI, EFF]	RED [AI(GaAs)]	GREEN	GREEN [HI, INT]	YELLOW	YELLOW [AI(InGaP)]	ORANGE	WHITE	BLUE [InGaN]
POWER DISSIPATION	95	90	95	95	95	80	95	80	114
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)	0.42 (FROM 40°C)
REVERSE VOLTAGE	12	5	12	12	5	12	5	5	5
LEAD REFLOW SOLDERING TEMPERATURE (FOR 5 SEC.)	260								
OPERATING TEMPERATURE	-40 TO +100								
STORAGE TEMPERATURE	-40 TO +100								

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	
OPERATING TEMPERATURE	-40 TO +100	
STORAGE TEMPERATURE	-40 TO +100	

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	
OPERATING TEMPERATURE	-40 TO +100	
STORAGE TEMPERATURE	-40 TO +100	

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	
OPERATING TEMPERATURE	-40 TO +100	
STORAGE TEMPERATURE	-40 TO +100	

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT - RED/BLUE BI-COLOR LED		
	COLOR	UNITS
	RED	BLUE
POWER DISSIPATION	100	100
PEAK FORWARD CURRENT (1/10 DUTY CYCLE, 10ms PULSE WIDTH)	100	20
CONTINUOUS FORWARD CURRENT	30	30
LINEAR DERATING FROM 80°C	1.0	0.50
LEAD REFLOW SOLDERING TEMPERATURE (FOR 5 SEC.)	260	
OPERATING TEMPERATURE	-40 TO +100	
STORAGE TEMPERATURE	-40 TO +100	

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT - RED/GRN/BLUE TRI-COLOR LED			
	RED	COLOR 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		
OPERATING TEMPERATURE	-55 TO +100		
STORAGE TEMPERATURE	-55 TO +100		