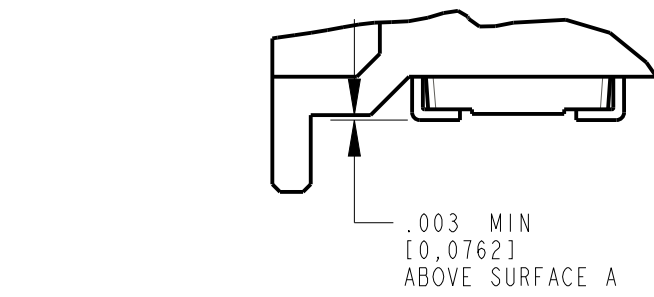
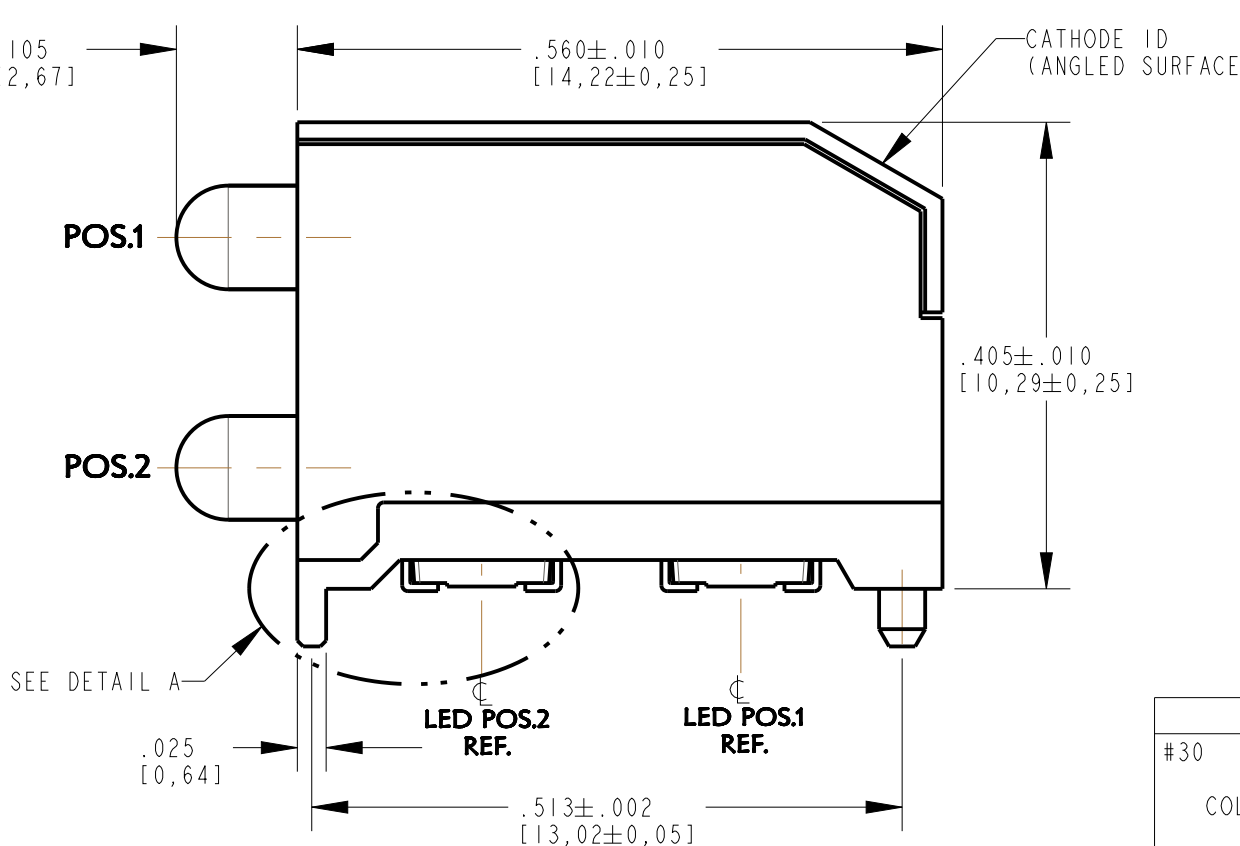
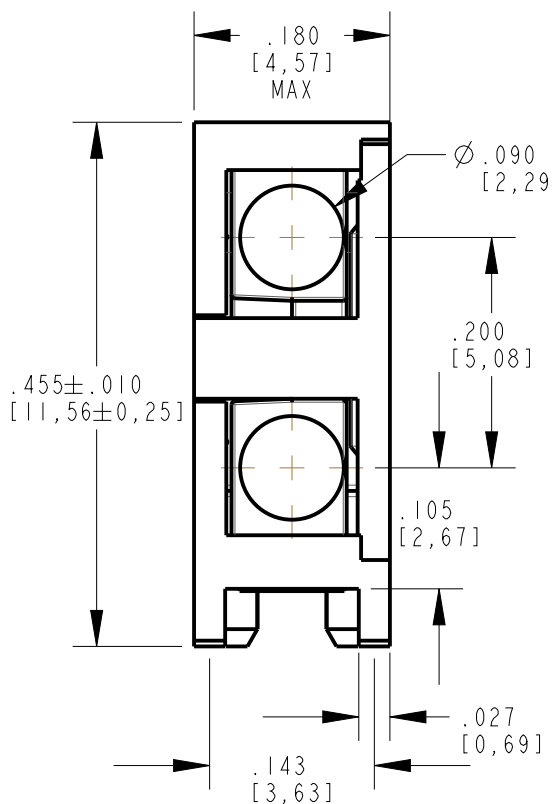


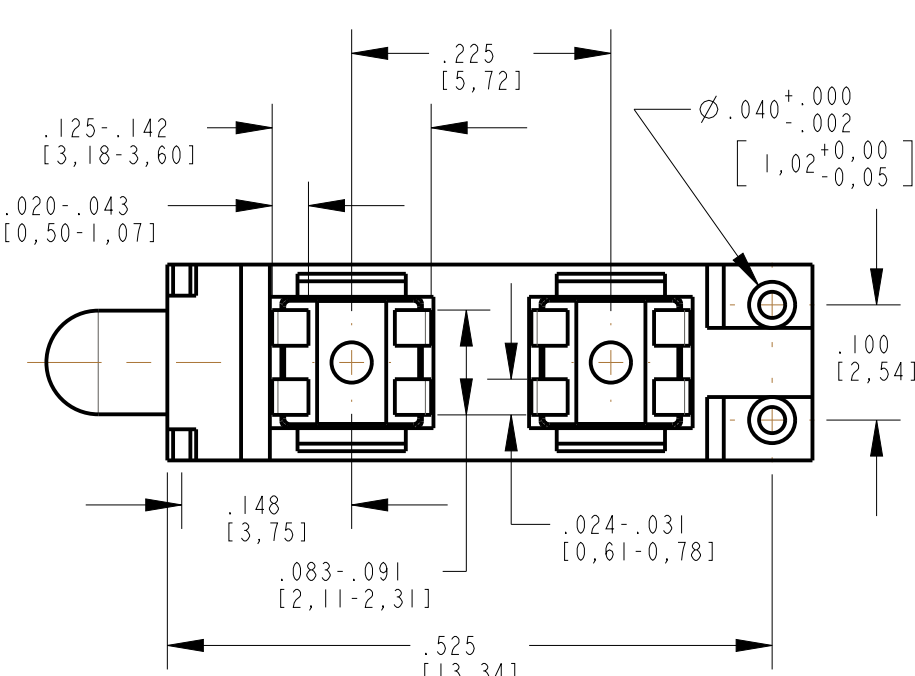
DIALIGHT PART NUMBER	PACKAGING	POSITION 1	POSITION 2	MSL
592-2020-302F	SAMPLE STRIP 13" REEL	RED [HI, EFF]	RED [HI, EFF]	2
592-2020-313F		RED [HI, EFF]	GREEN	2
592-2023-302F	SAMPLE STRIP 13" REEL	RED [HI, EFF]	GREEN	2
592-2023-313F		RED [AI(GaAs)]	RED [AI(GaAs)]	2
592-2121-302F	SAMPLE STRIP 13" REEL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



DETAIL A
SCALE 8.000



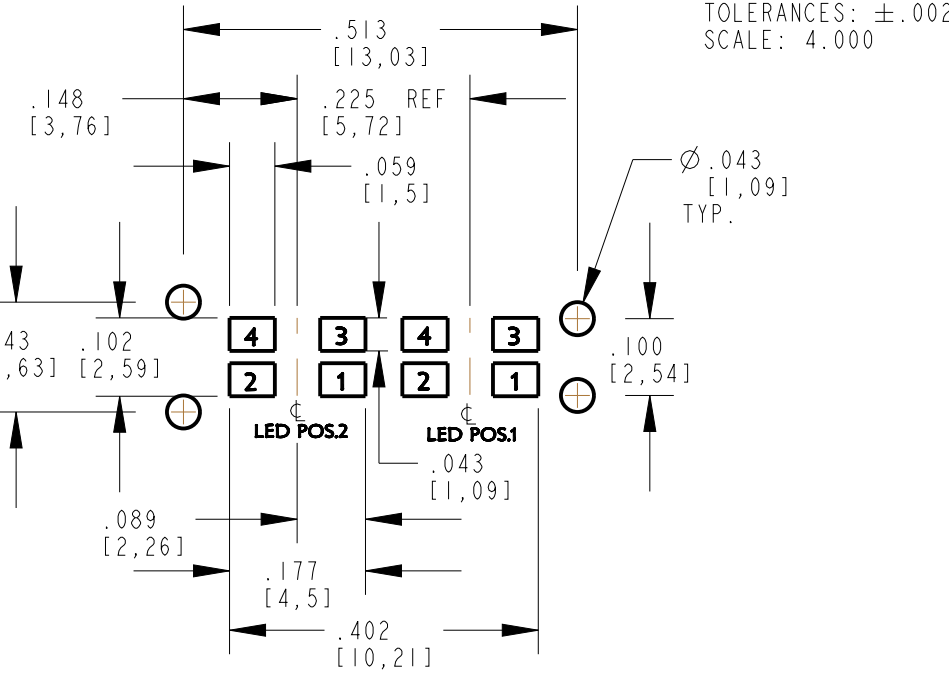
++SINGLE COLOR LED ASSEMBLY++



++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	10 @ V _R =12 V
21	RED [AI(GaAs)]	9	10	—	645	10 @ V _R =12 V
22	GREEN [HI, INT]	6	10	564	576	10 @ V _R =12 V
23	GREEN	4	10	564	570	10 @ V _R =12 V
24	YELLOW	2	10	580	587	10 @ V _R =5 V
25	ORANGE	2	10	600	606	10 @ V _R =5 V
26	BLUE [InGaN]	6	10	462	465	10 @ V _R =12 V
27	YELLOW [AlInGaP]	60	20	580	587	10 @ V _R =12 V
28	WHITE	34	10	X=.285; .33; .367 Y=.259; .33; .401	—	10 @ V _R =5 V
29	GREEN [InGaN]	56	20	—	525	10 @ V _R =12 V

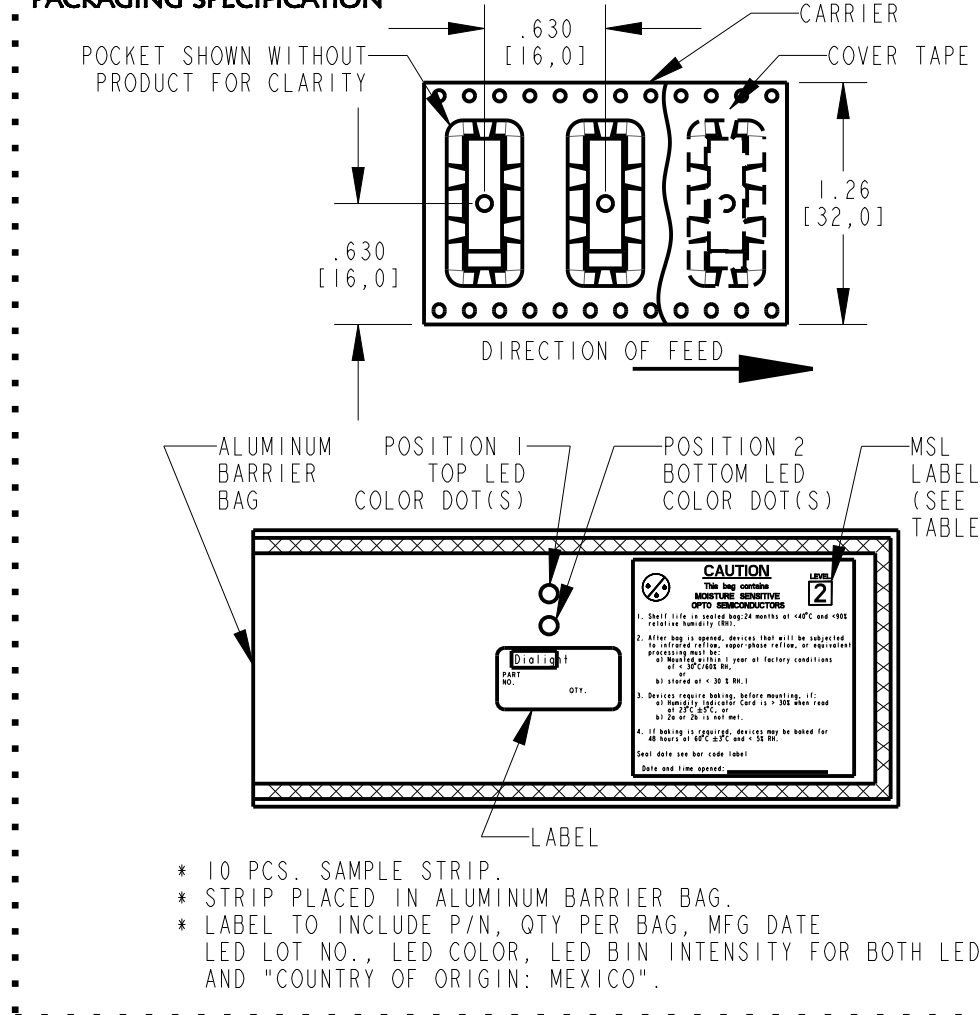
RECOMMENDED PAD LAYOUT - SINGLE COLOR



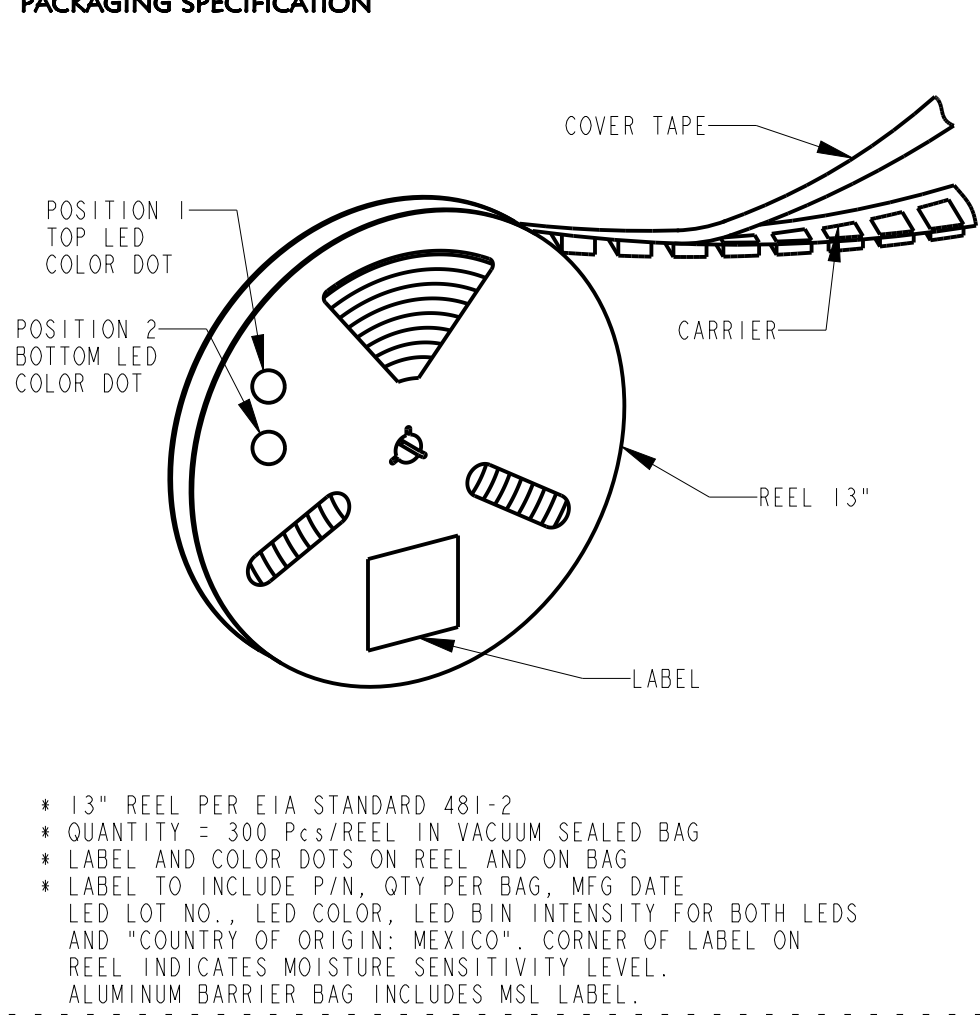
RECOMMENDED PAD LAYOUT - MULTI-COLOR

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 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

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

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

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

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

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

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

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

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	
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) 0.44 (FROM 55°C) 0.42 (FROM 40°C)	0.42
REVERSE VOLTAGE	12	5	12	12	5	12	5	5	5
LEAD REFLOW SOLDERING TEMPERATURE (FOR 5 SEC.)	260								
OPERATING TEMPERATURE	-40 TO +100								-55 TO +100
STORAGE TEMPERATURE	-40 TO +100								-55 TO +100

