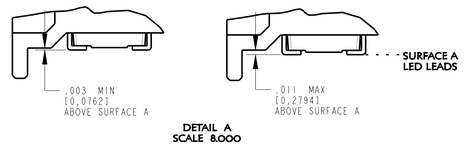
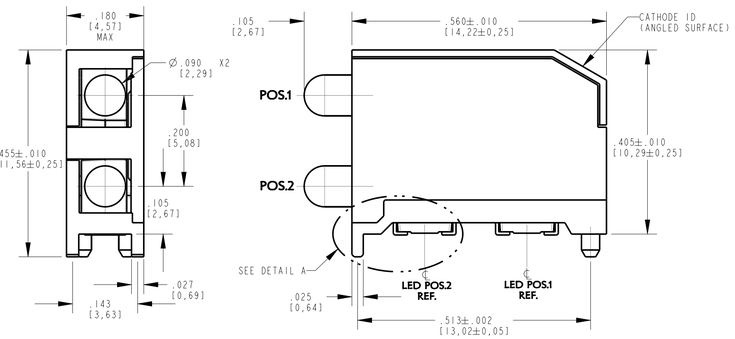
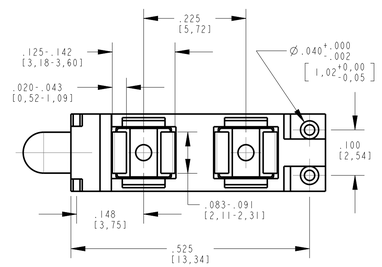
DIALIGHT PART NUMBER	PACKAGING	POSITION 1	POSITION 2	MSL
592-3030-835F	13" REEL	RED/GREEN	RED/GREEN	2
592-3131-834F	13" REEL	YELLOW/GREEN	YELLOW/GREEN	2
592-3531-832F	13" REEL	RED/GRN/BLUE	YELLOW/GREEN	2a & 2
592-3126-838F	13" REEL	YELLOW/GREEN	BLUE	2

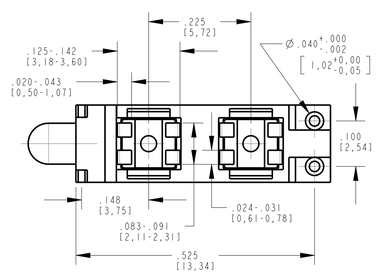
REV	ECN NO	REVISIONS	DRN	CKD	APP	DATE
A	——	NEW RELEASE	BP	——	NO	8-11-17
B	——	UPDATED NOTE 2, ADDED P/N 592-3126-838F	BP	——	NO	9-19-17





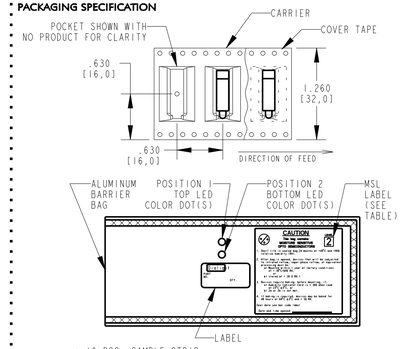


++SINGLE COLOR LED ASSEMBLY++



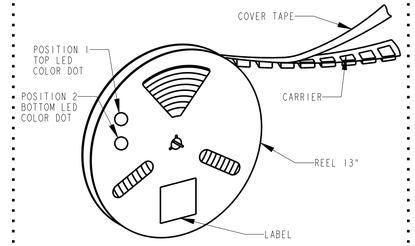
++BI-COLOR LED ASSEMBLY++

SAMPLE STRIP
PACKAGING SPECIFICATION

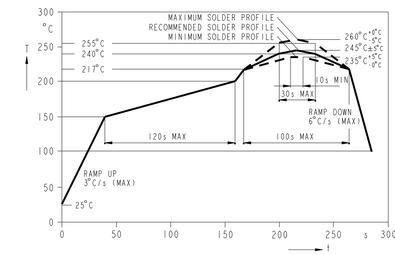


- 10 PCS. SAMPLE STRIP.
- STRIP PLACED IN ALUMINUM BARRIER BAG.
- LABEL TO INCLUDE P/N, QTY PER BAG, MFG DATE LED LOT NO., LED COLOR, LED BIN INTENSITY FOR BOTH LEDS AND "COUNTRY OF ORIGIN: MEXICO".

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

OPERATING CHARACTERISTICS AT 25°C AMBIENT													
#30 & #31 LED COLOR		LUMINOUS INTENSITY @If = 10 mA (mcd)			FORWARD VOLTAGE @If = 2 mA (V)		REVERSE CURRENT (µA) V = 12V		DOMINANT WAVELENGTH (nm)			PEAK WAVELENGTH (nm)
		MIN	TYP	MAX	TYP	MAX	TYP	MAX	MIN	TYP	MAX	TYP
RED/GRN	RED	——	11	——	1.8	2.2	0.01	10	624	630	636	643
	GREEN	——	5	——					566	570	575	572
YLW/GRN	YELLOW	——	14	——	1.8	2.2	0.01	10	580	587	595	591
	GREEN	——	5	——					566	570	575	572

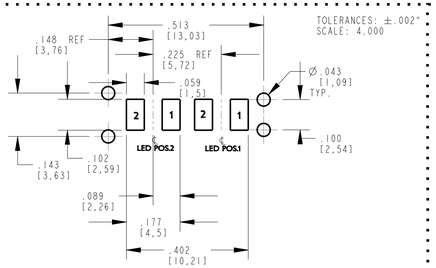
ABSOLUTE MAXIMUM RATINGS AT 25 °C AMBIENT	RED/GRN	YLW/GRN	UNITS
CONTINUOUS FORWARD CURRENT	15		mA
REVERSE VOLTAGE	12		V
SURGE CURRENT	100		mA
PEAK SOLDERING TEMPERATURE	245		°C
OPERATING TEMPERATURE	-40 TO +100		°C
STORAGE TEMPERATURE	-40 TO +100		°C

OPERATING CHARACTERISTICS AT 25°C AMBIENT - RED/GRN/BLUE TRI-COLOR LED								
#35 COLOR	LUMINOUS INTENSITY (mcd)	TEST CURRENT (mA)	DOMINANT WAVELENGTH (nm)			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

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

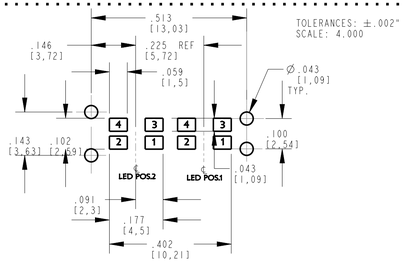
OPERATING CHARACTERISTICS AT 25°C AMBIENT										
#26 COLOR	LUMINOUS INTENSITY θI_F = 10 mA (mcd)			FORWARD VOLTAGE θI_F = 10 mA (V)		REVERSE CURRENT (mA)	DOMINANT WAVELENGTH (nm)			PEAK WAVELENGTH (nm)
	MIN	TYP	MAX	TYP	MAX	MAX	MIN	TYP	MAX	TYP
InGaN BLUE	4	7	10	3.5	4.2	10	462	465	468	428

ABSOLUTE MAXIMUM RATINGS AT 25°C AMBIENT	InGaN BLUE	UNITS
POWER DISSIPATION	90	mW
CONTINUOUS FORWARD CURRENT	20	mA
PEAK FORWARD CURRENT (t≤10µs, D=.005)	200	mA
DERATE LINEARLY FROM 55°C (60°C FOR RED)	0.44	mA/°C
REVERSE VOLTAGE (IR=10 µA)	5	V
STORAGE TEMPERATURE	-40 TO +100	°C
OPERATING TEMPERATURE	-40 TO +100	°C



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
YELLOW/GREEN	YELLOW CATHODE	YELLOW ANODE	GREEN ANODE	GREEN CATHODE
RED/GREEN	RED CATHODE	RED ANODE	GREEN ANODE	GREEN CATHODE
R/G/B TRI-COLOR	RED CATHODE	COMMON ANODE	GREEN CATHODE	BLUE CATHODE

RECOMMENDED PAD LAYOUT - MULTI-COLOR

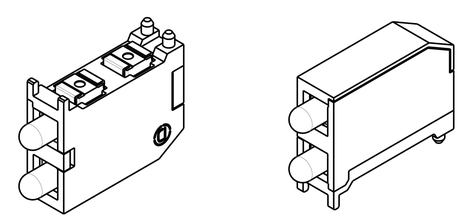
RoHS COMPLIANT 592-XXXX-83XF

Part Numbers with the "F" suffix ending are RoHS Compliant.
For example: 592-3030-835F
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

NOTES :

1. DIALIGHT PART NUMBERS: 592-XXXX-83XF.
2. ALL PARTS ARE SUPPLIED ON A 13 INCH REEL, 300 PCS/REEL
3. FRONT AND REAR TERMINALS (OF EACH LED) OF THE ASSEMBLY TO BE WITHIN .005" COPLANARITY.
4. STORAGE CONDITIONS FOR TAPED PRODUCT: RE-TAPING MAY BE NECESSARY FOR PRODUCT STORED MORE THAN TWELVE MONTHS.
5. PIN NUMBERS ARE FOR REFERENCE ONLY , DESIGNATION NON-EXISTENT ON PART.
6. MOISTURE SENSITIVITY LEVEL LABEL WILL BE PLACED ON BAG. CHECK CHART FOR PROPER LEVEL.
7. THIS ASSEMBLY CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES (ESDS). MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY, HANDLING, AND STORAGE IN ACCORDANCE WITH IPC-A-610.
8. FLAMMABILITY RATING
   HOUSING: UL-94-V0
   SILICONE LENS AND LED: UL-94HB



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SCALE: 6.000
ALL DIM'S IN: INCHES (MM)
TOLERANCES: UNLESS OTHERWISE SPECIFIED
FRACTIONS: ±1/64
DECIMALS (.XX): ±.02
DECIMALS (.XXX): ±.015
ANGLES: ±1°
FINISH: -
FSCM 83330

DRAWING NUMBER: C-18349
REV: B
TITLE: BI-LEVEL PRISM SILICONE LENS RoHS COMPLIANT
MATERIAL: -

Dialight
1501 ROUTE 34 SOUTH
FARMINGDALE, NJ 07727

SHEET 1 OF 1 | FAMILY TABLE: