



Customer Product/Process Change Notification

PCN # OES11092901_592

Issued Date: 9/29/2011

Issued By: Nick Oesterheld

Author: Nick Oesterheld

Change affects whole product family? YES

Part #'s affected (See attached if entire product family is affected)

See attached Part Number Listing

Description of Change:

Part improvement by replacing Hard Lens with a Silicone Lens and with new housing halves that snap together. Mounting pins are .010" longer and overall height .455" was .430". Width of part.185" max. was .170" max. Lens dia .100" was .112". Assigned new P/ns 592-xxxx-302F,-313F for the Silicone Lens Prism. Silicone Lens is 30% lower intensity than the Hard Lens.

Reason for Change:

To improved 592 manufacturing and eliminates the molding issues with the Hysol Hard Lens and improve the coplanarity of part. The LED seating plane of LEDs is now on the housing and not on the Lens eliminating tolerance build up. LED orientation polarity chamfers are also placed inside the housing seating plane to eliminate incorrect placement of LED polarity during assembly. LED pins are .010" longer for more retention in PCB.

Properties of Old vs. Changed Product:

See attached comparison sheets and pictures.

Disposition of Old Product:

Use as is until Depleted. Last time ship date for hard Lens parts April 1, 2012.

Expected Implementation Date:

Customer Feedback Expected by:

Additional Comments: (Include Potential Risks if Appropriate)

Improvement in coplanarity and Lens molding imperfections.

Supporting Qualification Data:

Available upon Request

Approved By:

(Minimum of three approvals are required.)

Vice President of Operations: _____

Vice President of Sales OED/Signals: _____

Director of Customer Service: Kathy Smith

Business Development Manager Nick Oesterheld

Director of Quality: Rich Liskoff

| Hard Lens OLD P/N W/O DASHES | Hard Lens OLD P/N W DASHES | DESCRIPTION | SIL LENS REPLACEMENT P/Ns WITH DASHES | SIL LENS REPLACEMENT P/Ns W/O DASHES | REPLACEMENT DESCRIPTION |
|---------------------------------|-------------------------------|----------------------------------|--|---|---------------------------------|
| 5921010002F | 592-1010-002F | BI LEV PRISM R,R LC SMPL STRIP | 592-1010-302F | 5921010302F | BLVL PRSM R-R LC SMPLSTR SIL |
| 5921010013F | 592-1010-013F | BI LEV PRISM R,R LC 13" REEL | 592-1010-313F | 5921010313F | BLVL PRSM R,R LC 13" RL SIL LN |
| 5921313002F | 592-1313-002F | BI LEV PRISM G,G LC SMPL STRIP | 592-1313-302F | 5921313302F | BLVL PRSM G-G LC SMPLSTR SIL |
| 5921313013F | 592-1313-013F | BI LEV PRISM G,G LC 13" REEL | 592-1313-313F | 5921313313F | BLVL PRSM G-G LC 13" RL SIL LN |
| 5921414002F | 592-1414-002F | BI LEV PRISM Y,Y LC SMPL STRIP | 592-1414-302F | 5921414302F | BLVL PRSM Y-Y LC SMPLSTR SIL |
| 5921414013F | 592-1414-013F | BI LEV PRISM Y,Y LC 13" REEL | 592-1414-313F | 5921414313F | BLVL PRSM Y,Y LC 13" RL SIL LN |
| 5921515002F | 592-1515-002F | BI LEV PRISM O,O LC SMPL STRIP | 592-1515-302F | 5921515302F | BLVL PRSM O-O LC SMPLSTR SIL |
| 5921515013F | 592-1515-013F | BI LEV PRISM O,O LC 13" REEL | 592-1515-313F | 5921515313F | BLVL PRSM O,O LC 13" RL SIL LN |
| 5922020002F | 592-2020-002F | BI LEV PRISM R-R SAMPLE STRIP | 592-2020-302F | 5922020302F | BI-LVL PRISM R-R SMPLSTR SIL |
| 5922020013F | 592-2020-013F | BI-LEVEL PRISM R-R 13" REEL | 592-2020-313F | 5922020313F | BI-LVL PRISM R-R 13"RL SIL LNS |
| 5922023002F | 592-2023-002F | BI LEV PRISM R-G SAMPLE STRIP | 592-2023-302F | 5922023302F | BI-LVL PRISM R-G SMPLSTR SIL |
| 5922023013F | 592-2023-013F | BI LEV PRISM R-G 13" REEL | 592-2023-313F | 5922023313F | BI-LVL PRISM R-G 13"RL SIL |
| 5922121002F | 592-2121-002F | BI LEV PRISM R-R SAMPLE STRIP | 592-2121-302F | 5922121302F | BI-LVL PRISM R-R SMPLSTR SIL |
| 5922121013F | 592-2121-013F | BI-LEVEL PRISM R-R 13" REEL | 592-2121-313F | 5922121313F | BI-LVL PRISM R-R 13"RL SIL LNS |
| 5922124002F | 592-2124-002F | BI LEV PRISM R-Y SAMPLE STRIP | 592-2124-302F | 5922124302F | BI-LVL PRISM R-Y SMPLSTR SIL |
| 5922124013F | 592-2124-013F | BI-LEVEL PRISM R/Y 13" REEL | 592-2124-313F | 5922124313F | BI-LVL PRISM R-Y 13"RL SIL LNS |
| 5922126809F | 592-2126-809F | BI LEV PRISM R-B SMPL STRIP | 592-2126-302F | 5922126302F | BI-LVL PRISM R-B SMPLSTR SIL |
| 5922126810F | 592-2126-810F | BI LEV PRISM R-B 13"REELBIN | 592-2126-313F | 5922126313F | BI-LVL PRISM R-B 13"RL SIL LNS |
| 5922222002F | 592-2222-002F | BI LEV PRISM G-G SAMPLE STRIP | 592-2222-302F | 5922222302F | BI-LVL PRISM G-G SMPLSTR SIL |
| 5922222013F | 592-2222-013F | BI-LEVEL PRISM G-G 13" REEL | 592-2222-313F | 5922222313F | BI-LVL PRISM G-G 13"R SIL |
| 5922320002F | 592-2320-002F | BI LEV PRISM G-R SAMPLE STRIP | 592-2320-302F | 5922320302F | BI-LVL PRISM G-R SMPLSTR SIL |
| 5922320013F | 592-2320-013F | BI LEV PRISM G-R 13" REEL | 592-2320-313F | 5922320313F | BI-LVL PRISM G-R 13"RL SIL |
| 5922323002F | 592-2323-002F | BI LEV PRISM G-G SAMPLE STRIP | 592-2323-302F | 5922323302F | BI-LVL PRISM G-G SMPLSTR SIL |
| 5922323013F | 592-2323-013F | BI-LEVEL PRISM G-G 13" REEL | 592-2323-313F | 5922323313F | BI-LVL PRISM G-G 13"R SIL |
| 5922324002F | 592-2324-002F | BI LEV PRISM G-Y SAMPLE STRIP | 592-2324-302F | 5922324302F | BI-LVL PRISM G-Y SMPLSTR SIL |
| 5922324013F | 592-2324-013F | BI LEVEL PRISM G-Y 13" REEL | 592-2324-313F | 5922324313F | BI-LVL PRISM G-Y 13"RL SIL LNS |
| 5922326002F | 592-2326-002F | BI LEV PRISM G-B SAMPLE STRIP | 592-2326-302F | 5922326302F | BI-LVL PRISM G-B SMPLSTR SIL |
| 5922326013F | 592-2326-013F | BI-LEVEL PRISM G-B 13" REEL | 592-2326-313F | 5922326313F | BI-LVL PRISM G-B 13"RL SIL |
| 5922326801F | 592-2326-801F | BI-LEVEL PRISM TG-B 13" REEL | 592-2326-313F | 5922326313F | BI-LVL PRISM TG-B 13"RL SIL |
| 5922326802F | 592-2326-802F | BI-LEVEL PRISM TG-B SAMPLE STRIP | 592-2326-302F | 5922326302F | BI-LVL PRISM TG-B SMPLSTR SIL |
| 5922327801F | 592-2327-801F | BI-LEVEL PRISM TG-Y 13" REEL | 592-2327-313F | 5922327313F | BI-LVL PRISM TG-Y 13"RL SIL |
| 5922327802F | 592-2327-802F | BI-LEVEL PRISM TG-Y SAMPLE STRIP | 592-2327-302F | 5922327302F | BI-LVL PRISM TG-Y SMPLSTR SIL |
| 5922420002F | 592-2420-002F | BI-LEVEL PRISM Y-R SMPL STRIP | 592-2420-302F | 5922420302F | BI-LVL PRISM Y-R SMPLSTR SIL |
| 5922420013F | 592-2420-013F | BI LEVEL PRISM Y-R 13" REEL | 592-2420-313F | 5922420313F | BI-LVL PRISM Y-R 13"RL SIL |
| 5922422002F | 592-2422-002F | BI-LEVEL PRISM Y-G SAMPLE STRIP | 592-2422-302F | 5922422302F | BI-LVL PRISM Y-G SMPLSTR SIL |
| 5922422013F | 592-2422-013F | B-LEVEL PRISM Y-G 13: REEL | 592-2422-313F | 5922422313F | BI-LVL PRISM Y-G 13"RL SIL |
| 5922423002F | 592-2423-002F | BI LEV PRISM Y-G SAMPLE STRIP | 592-2423-302F | 5922423302F | BI-LVL PRISM Y-G SMPLSTR SIL |
| 5922423013F | 592-2423-013F | BI LEVEL PRISM Y-G 13" REEL | 592-2423-313F | 5922423313F | BI-LVL PRISM Y-G 13"RL SIL |
| 5922424002F | 592-2424-002F | BI-LEVEL PRISM Y-Y SAMPLE STRIP | 592-2424-302F | 5922424302F | BI-LVL PRISM Y-Y SMPLSTR SIL |
| 5922424013F | 592-2424-013F | BI-LEVEL PRISM Y-Y 13" REEL | 592-2424-313F | 5922424313F | BI-LVL PRISM Y-Y 13"R SIL |
| 5922436002F | 592-2436-002F | BI LEV PRISM Y-O/G SMPL STRIP | 592-2436-302F | 5922436302F | BI-LVLPRISM Y-O/G SMPLSTR SIL |
| 5922436013F | 592-2436-013F | BI LEV PRISM Y-O/G 13"REEL | 592-2436-313F | 5922436313F | BI-LVL PRISM Y-O/G 13"RL SIL |
| 5922525002F | 592-2525-002F | BI-LEVEL PRISM O-O SAMPLE STRIP | 592-2525-302F | 5922525302F | BI-LVL PRISM O-O SMPLSTR SIL |
| 5922525013F | 592-2525-013F | BI-LEVEL PRISM O-O 13" REEL | 592-2525-313F | 5922525313F | BI-LVL PRISM O-O 13"R SIL |
| 5922626002F | 592-2626-002F | BI-LEVEL PRISM B-B SAMPLE STRIP | 592-2626-302F | 5922626302F | BI-LVL PRISM B-B SMPLSTR SIL |
| 5922626013F | 592-2626-013F | BI-LEVEL PRISM B-B 13" REEL | 592-2626-313F | 5922626313F | BI-LVL PRISM B-B 13"R SIL |
| 5922627002F | 592-2627-002F | BI-LEV PRISM B-Y | 592-2627-302F | 5922627302F | BI-LVL PRISM B-Y SMPLSTR SIL |
| 5922627013F | 592-2627-013F | BI-LEVEL PRISM B-Y 13" REEL | 592-2627-313F | 5922627313F | BI-LVL PRISM B-Y 13"RL SIL |
| 5922628002F | 592-2628-002F | BILEV PRISM B-W SMPL STRIP | 592-2628-302F | 5922628302F | BI-LVL PRISM B-W SMPLSTR SIL |
| 5922628013F | 592-2628-013F | BILEVEL PRISM B-W 13" REEL | 592-2628-313F | 5922628313F | BI-LVL PRISM B-W 13"RL SIL |
| 5922631002F | 592-2631-002F | BI LEV PRISM B-Y/G SAMPLE STRIP | 592-2631-302F | 5922631302F | BI-LVLPRISM B-Y/G SMPSTR SIL |
| 5922631013F | 592-2631-013F | BI LEVEL PRISM B-Y/G 13" REEL | 592-2631-313F | 5922631313F | BI-LVLPRISM B-Y/G 13"RL SIL |
| 5922631811F | 592-2631-811F | BI LEV PRISM B-Y/G SMPL STRIP | 592-2631-302F | 5922631302F | BI-LVLPRISM B-Y/G SMPSTR SIL |
| 5922631812F | 592-2631-812F | BI LEV PRISM B-Y/G 13"REELBIN | 592-2631-313F | 5922631313F | BI-LVLPRISM B-Y/G 13"RL SIL |
| 5922727002F | 592-2727-002F | BI-LEVEL PRISM Y-Y SAMPLE STRIP | 592-2727-302F | 5922727302F | BI-LVL PRISM Y-Y SMPLSTR SIL |
| 5922727013F | 592-2727-013F | BI-LEVEL PRISM Y-Y 13" REEL | 592-2727-313F | 5922727313F | BI-LVL PRISM Y-Y 13"R SIL |
| 5922727805F | 592-2727-805F | BI-LEVEL PRISM BRY-Y SMPL STRIP | 592-2727-805SF | 5922727805SF | BI-LVL PRISM BRY-Y SMPSTRSIL |
| 5922727806F | 592-2727-806F | BI-LEV PRISM BRY-Y 13"REEL | 592-2727-806SF | 5922727806SF | BI-LVL PRISM BRY-Y 13"R SIL |
| 5922826002F | 592-2826-002F | BILEV PRISM W-B SMPL STRIP | 592-2826-302F | 5922826302F | BI-LVL PRISM W-B SMPLSTR SIL |
| 5922826013F | 592-2826-013F | BILEV PRISM W-B 13" REEL | 592-2826-313F | 5922826313F | BI-LVL PRISM W-B 13"RL SIL |
| 5922828002F | 592-2828-002F | BILEV PRISM W-W SMPL STRIP | 592-2828-302F | 5922828302F | BI-LVL PRISM W-W SMPLSTR SIL |
| 5922828013F | 592-2828-013F | BI-LEVEL PRISM W-W 13" REEL | 592-2828-313F | 5922828313F | BI-LVL PRISM W-W 13"R SIL |
| 5922927002F | 592-2927-002F | BI-LEV PRISM G-Y SMPL STRIP | 592-2927-302F | 5922927302F | BI-LVL PRISM TG-Y SMPLSTR SIL |
| 5922927013F | 592-2927-013F | BI-LEV PRISM G-Y 13"REEL | 592-2927-313F | 5922927313F | BI-LVL PRISM TG-Y 13"RL SIL |
| 5923030002F | 592-3030-002F | BILEV PRISM R/G-R/G SMPL STRIP | 592-3030-302F | 5923030302F | BLVLPRSM R/G-R/G SMPSTRP SIL |
| 5923030013F | 592-3030-013F | BILEVEL PRISM R/G-R/G 13" REEL | 592-3030-313F | 5923030313F | BLVL PRSM R/G-R/G 13"RL SIL LN |
| 5923031002F | 592-3031-002F | BILEV PRISM R/G-Y/G SMPL STRIP | 592-3031-302F | 5923031302F | BLVLPRSM R/G-Y/G SMPSTRP SIL |
| 5923031013F | 592-3031-013F | BI LEV PRISM R/G-Y/G 13" REEL | 592-3031-313F | 5923031313F | BLVL PRSM R/G-Y/G 13"RL SIL LN |
| 5923034002F | 592-3034-002F | BI LEV PRISM R/G/R/B SMPL STRIP | 592-3034-302F | 5923034302F | BLVLPRSM R/G-R/B SMPSTRP SIL |
| 5923034013F | 592-3034-013F | BI LEV R/G, R/B 13" REEL | 592-3034-313F | 5923034313F | BLVL PRSM R/G-R/B 13"RL SIL LN |
| 5923126002F | 592-3126-002F | BI LEV PRISM Y/G-B SAMPLE STRIP | 592-3126-302F | 5923126302F | BI-LVLPRISM Y/G-B SMPSTR SIL |
| 5923126013F | 592-3126-013F | BI-LEVEL PRISM Y/G,B 13" REEL | 592-3126-313F | 5923126313F | BI-LVLPRISM Y/G-B 13"RL SIL |
| 5923126815F | 592-3126-815F | BI LEV PRISM Y/G-B SMPL STRIP | 592-3126-302F | 5923126302F | BI-LVLPRISM Y/G-B SMPL STRIP |
| 5923126816F | 592-3126-816F | BI LEV PRISM Y/G-B 13"REELBIN | 592-3126-313F | 5923126313F | BI-LVLPRISM Y/G-B 13"RL SIL |
| 5923131002F | 592-3131-002F | BILEV PRISM Y/G-Y/G SMPL STRIP | 592-3131-302F | 5923131302F | BI-LVLPRISM Y/G-Y/G SMPSTRP SIL |
| 5923131013F | 592-3131-013F | BILEVEL PRISM Y/G-Y/G 13" REEL | 592-3131-313F | 5923131313F | BLVL PRSM Y/G-Y/G 13"RL SIL LN |
| 5923131813F | 592-3131-813F | BILEV PRISM Y/G-Y/G SMPL STRIP | 592-3131-302F | 5923131302F | BLVL PRSM Y/G-Y/G 13"SMPL STRIP |
| 5923131814F | 592-3131-814F | BILEV PRISM Y/G-Y/G 13"REELBIN | 592-3131-313F | 5923131313F | BLVL PRSM Y/G-Y/G 13"RL SIL LN |
| 5923232002F | 592-3232-002F | BILEV PRISM R/Y-R/Y SMPL STRIP | 592-3232-302F | 5923232302F | BLVLPRSM R/Y-R/Y SMPSTRP SIL |
| 5923232013F | 592-3232-013F | BILEVEL PRISM R/Y-R/Y 13" REEL | 592-3232-313F | 5923232313F | BLVL PRSM R/G-Y/G 13"RL SIL |
| 5923236002F | 592-3236-002F | BI LEV PRISM R/Y-O/G SMPL STR | 592-3236-302F | 5923236302F | BI-LVPRISM R/Y-O/G SMPSTRSIL |
| 5923236013F | 592-3236-013F | BI LEV PRISM R/Y-O/G 13"RL | 592-3236-313F | 5923236313F | BI-LVL PRSM R/Y-O/G 13"RL SIL |
| 5923535804F | 592-3535-804F | BI LEV PRSM R/G/B-R/G/B STRIP | 592-3535-302F | 5923535302F | BLVL PRSM R/G/B-R/G/B SS SILNS |
| 5923535803F | 592-3535-803F | BI LVL PRISM R/G/B-R/G/B 13" R | 592-3535-313F | 5923535313F | BLVL PRSM R/G/B-R/G/B 13" SLNS |

NEW vs. OLD Comparison:



New 592 customer drawing:



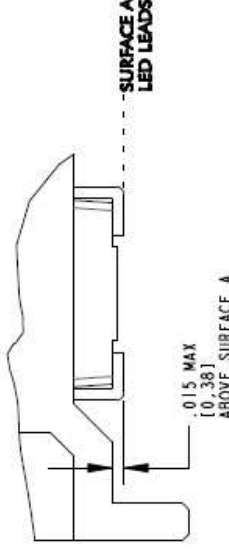
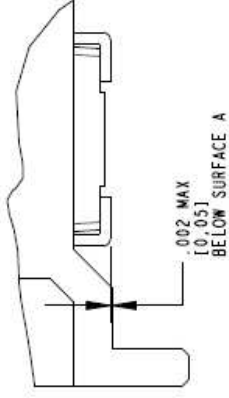
Old 592 customer drawing:



- **OLD DESIGN**
 - 3 COMPONENT TOLERANCE STACK UP
 - LED IS SEATED ON LENS
 - LENS IS COMPRESSION MOLDED THERMOSET
- **NEW DESIGN**
 - 2 COMPONENT TOLERANCE STACK UP
 - LED IS SEATED ON HOUSING
 - LENS IS INJECTION MOLDED SILICONE



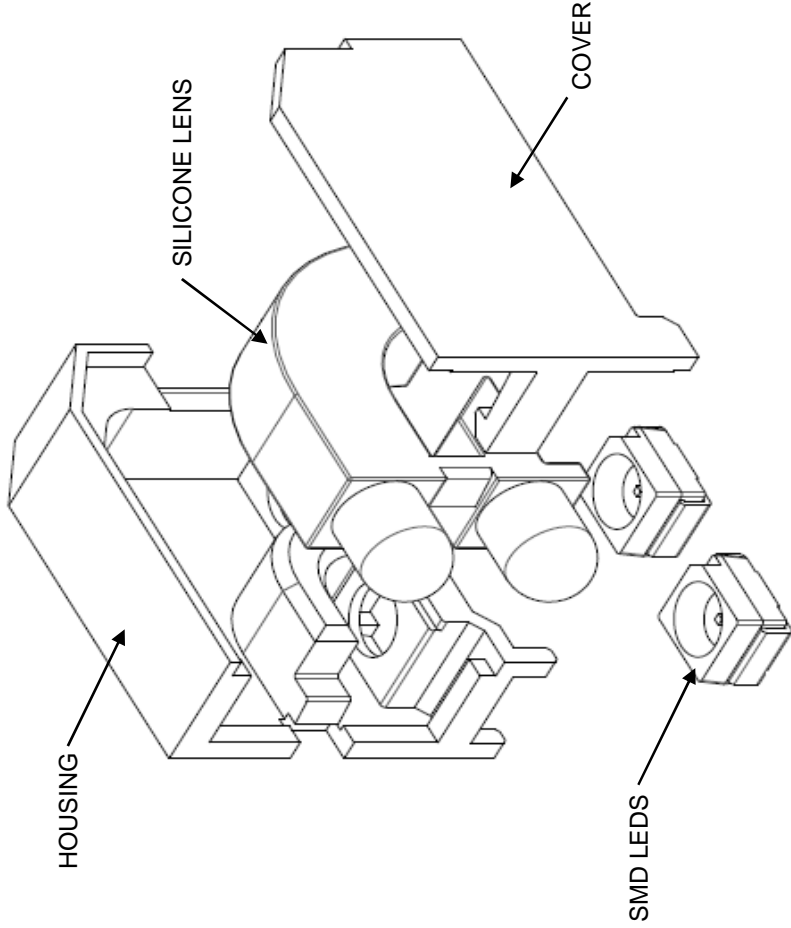
NEW DESIGN LED LEAD PROTRUSION SPEC



*LED LEAD PROTRUSION TOLERANCE RANGE IS BASED ON LED HEIGHT AND TOLERANCE OF $\pm .008$ **



NEW DESIGN 592-XXXX-3XXF

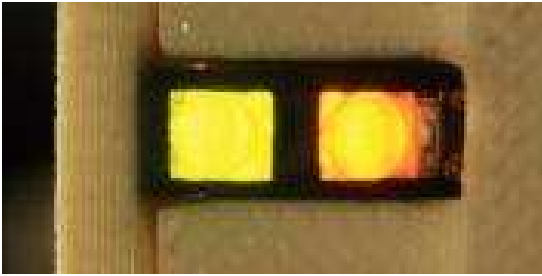


- IMPROVED CO-PLANARITY
- BETTER CONTROLLED LED LEAD PROTRUSION



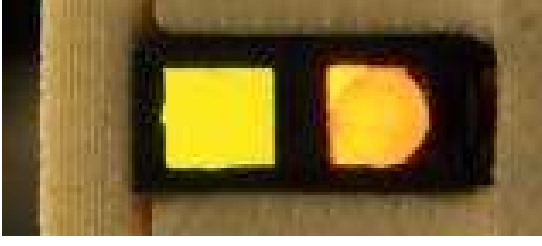
**ILLUMINATED SAMPLES
@ 10mA DRIVE CURRENT**

HARD LENS



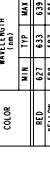
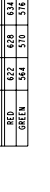
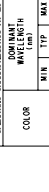
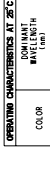
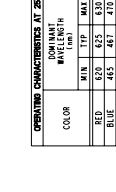
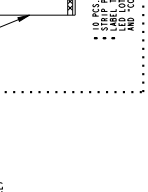
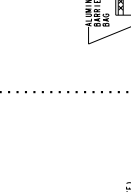
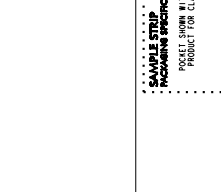
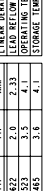
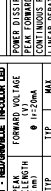
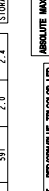
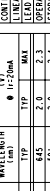
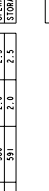
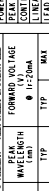
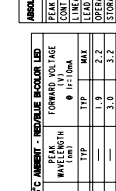
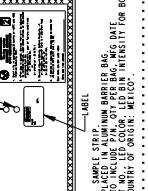
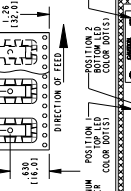
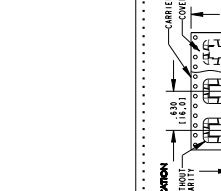
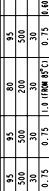
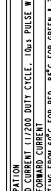
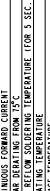
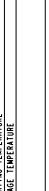
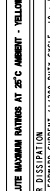
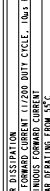
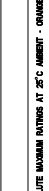
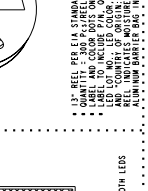
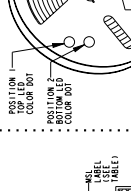
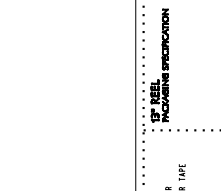
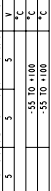
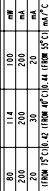
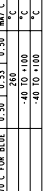
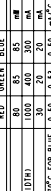
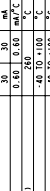
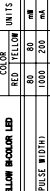
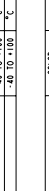
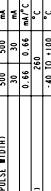
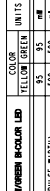
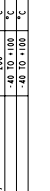
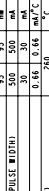
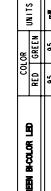
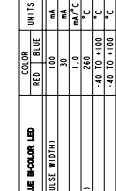
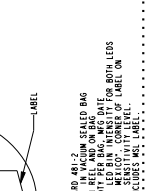
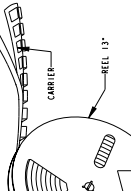
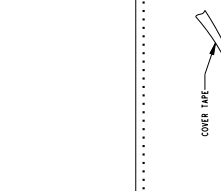
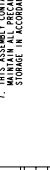
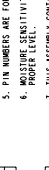
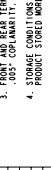
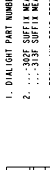
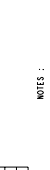
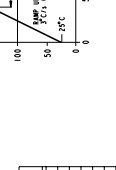
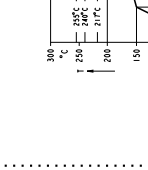
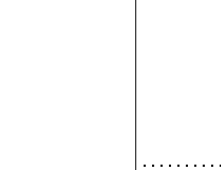
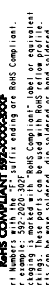
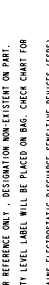
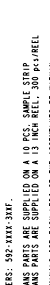
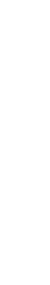
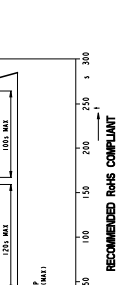
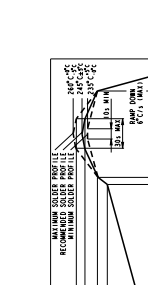
592-XXXX-013F

SILICONE LENS

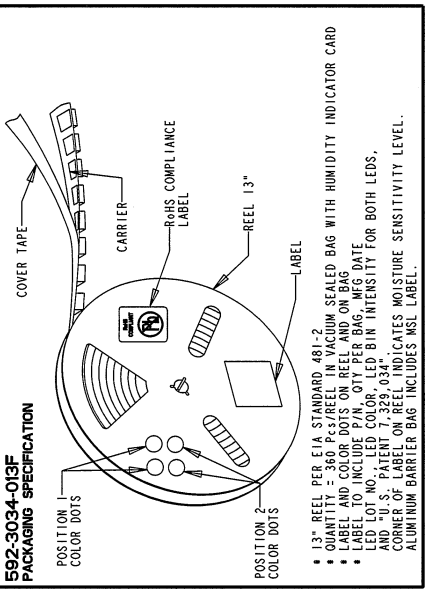


592-XXXX-313F

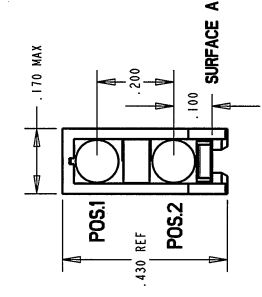




| REV. | ECN NO. | REVISIONS | DRN/CHD. | APP. | DATE |
|------|---------|--|----------|-------|------------|
| A | | NEW RELEASE | TMC | N. O. | MES 8-3-06 |
| B | | ADDED U.S. PATENT INFO TO LABELS IN REEL AND SAMPLE STRIP NOTES. ADDED NOTE 9, UPDATED SPEC. | K.L.J. | MB | 6-28-08 |



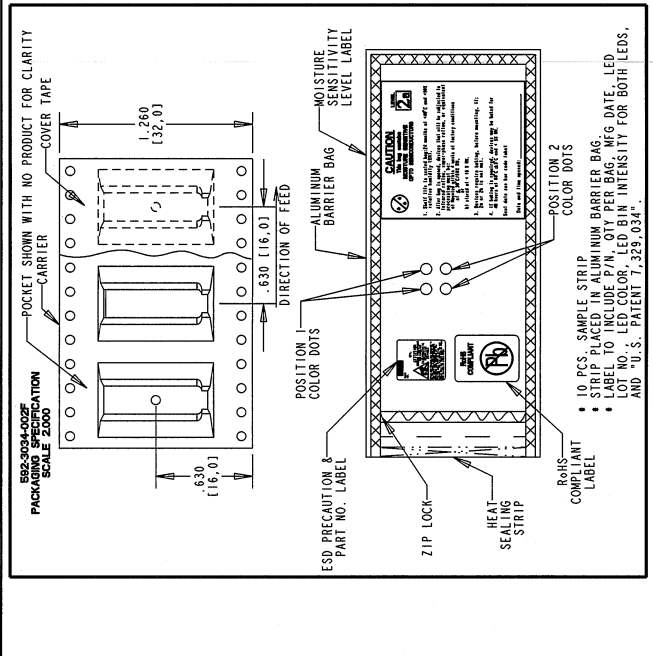
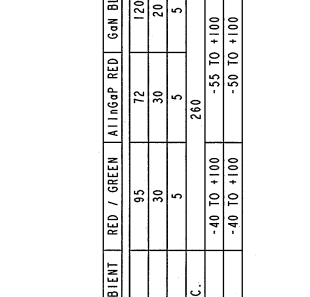
| PART NUMBER | POSITION 1 | POSITION 2 | MOISTURE LEVEL |
|---------------|------------|------------|----------------|
| 592-3034-002F | RED/GREEN | RED/BLUE | 2+ |
| 592-3034-013F | RED/GREEN | RED/BLUE | 2+ |



ATTENTION: OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES

NOTES:

- 1- STORAGE OF TAPED PARTS SHALL NOT EXCEED TWELVE (12) MONTHS AFTER WHICH RE-PACKAGING IS REQUIRED
- 2- FRONT AND REAR TERMINALS FOR EACH LED OF THE ASSEMBLY TO BE WITHIN .005 COPPLANARITY
- 3- MOISTURE SENSITIVITY SHALL BE PLACED ON THE BAG
- 4- THIS ASSEMBLY CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES (LEDs). MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY, HANDLING AND STORAGE IN ACCORDANCE WITH IPC-A-610.
- 5- DIALIGHT PART NUMBERS = 592-3034-002F (13" REEL) 592-3034-013F (13" REEL)
- 6- PATENT INFORMATION: U.S. PATENT 7,329,034



| CHARACTERISTICS | COLOR | | MIN | TYP | MAX | UNITS | TEST CONDITIONS |
|---------------------|-------|-------|------|------|-----|---------------|-----------------------|
| | RED | GREEN | | | | | |
| LUMINOUS INTENSITY | 8.0 | 13.0 | | | | mc/d | $I_f = 20 \text{ mA}$ |
| FORWARD VOLTAGE | 2.0 | 2.5 | | | | V | $I_f = 10 \text{ mA}$ |
| REVERSE CURRENT | RED | GREEN | -0.1 | 10.0 | | μA | $V_R = 5 \text{ V}$ |
| PEAK WAVELENGTH | RED | GREEN | 622 | 628 | 634 | nm | |
| DOMINANT WAVELENGTH | RED | GREEN | 564 | 570 | 576 | nm | |

| CHARACTERISTICS | COLOR | | MIN | TYP | MAX | UNITS | TEST CONDITIONS |
|--------------------------|-------|-------|-----|-----|-----|---------------|-----------------------|
| | RED | GREEN | | | | | |
| LUMINOUS INTENSITY | 30.0 | 30.0 | | | | mc/d | $I_f = 20 \text{ mA}$ |
| FORWARD VOLTAGE | 1.9 | 2.4 | | | | V | $I_f = 20 \text{ mA}$ |
| REVERSE CURRENT | RED | GREEN | 10 | 100 | | μA | $V_R = 5 \text{ V}$ |
| DOMINANT WAVELENGTH | RED | GREEN | 621 | 626 | 632 | nm | |
| PEAK EMISSION WAVELENGTH | RED | GREEN | 454 | 462 | 470 | nm | |

