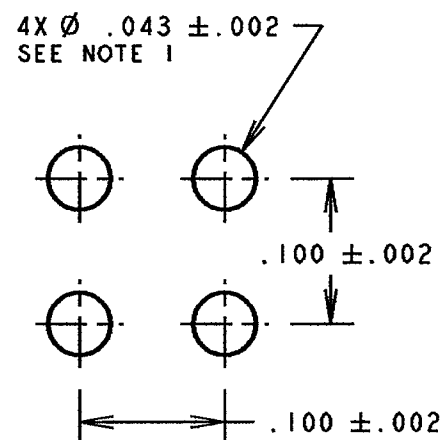
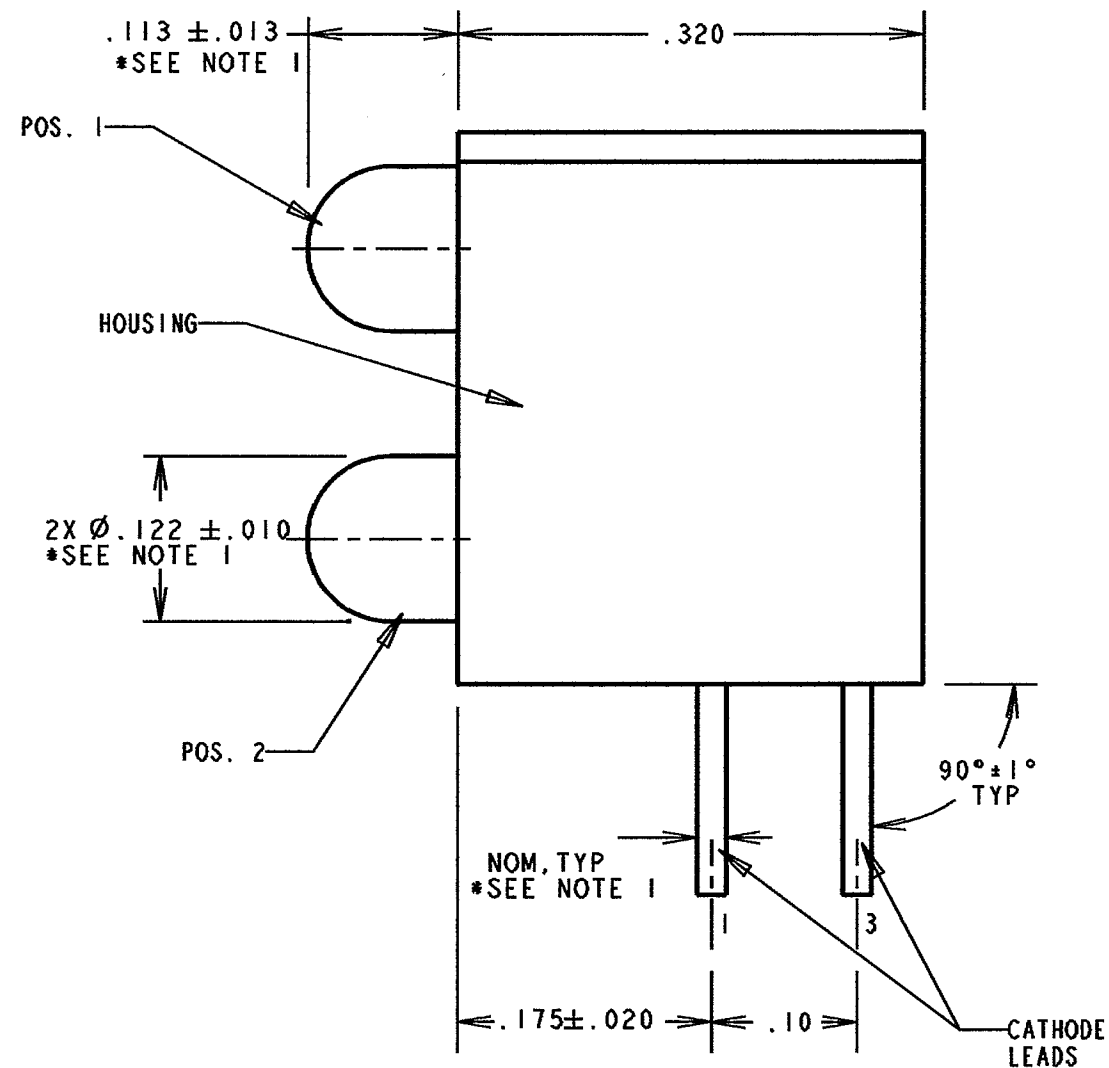
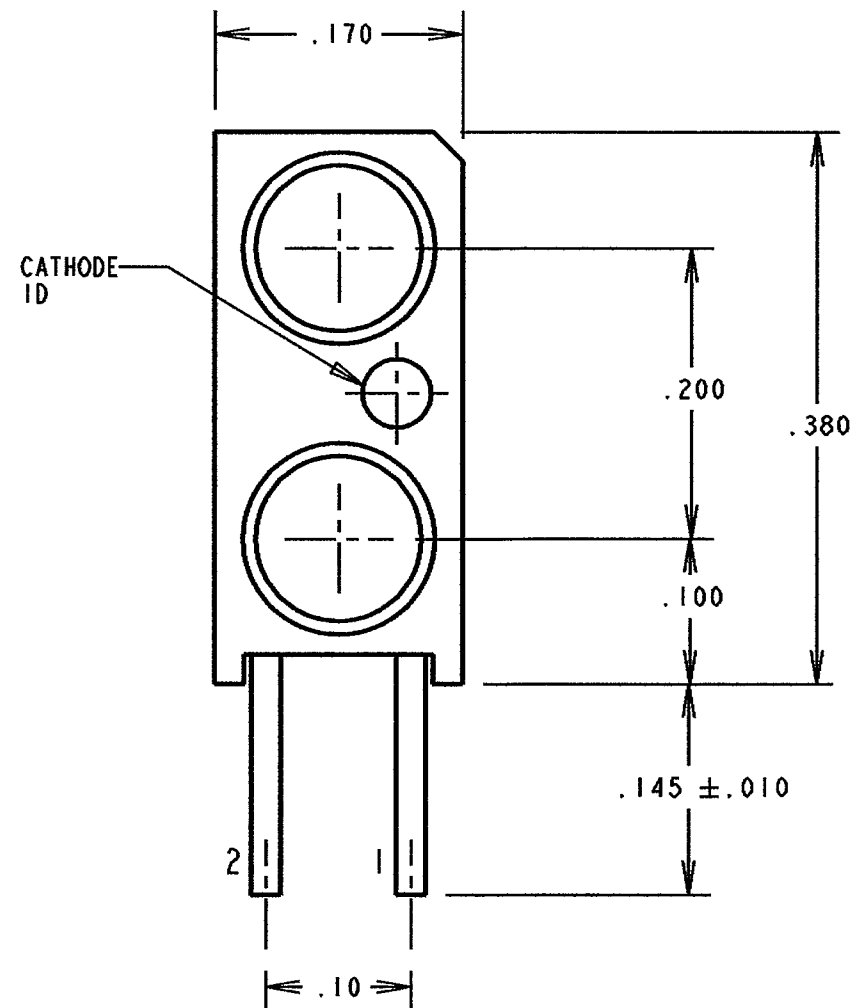
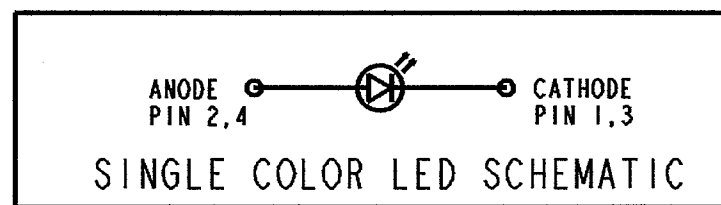
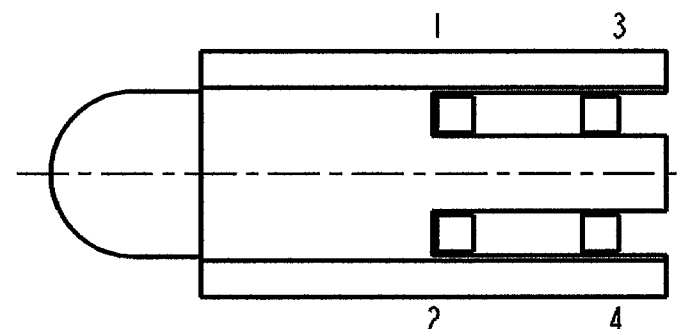


| ASSY. NO. (CAT. NO.) | LED COLOR | | NOTES |
|-------------------------|------------|------------|-------|
| | POSITION 1 | POSITION 2 | |
| 553-0101F | BLANK | RED | |
| 553-0102F | BLANK | GREEN | |
| 553-0103F | BLANK | YELLOW | |
| 553-0107F | BLANK | ORANGE | |
| 553-0108F | BLANK | BLUE | ** |
| 553-0110F | RED | BLANK | |
| 553-0111F | RED | RED | |
| 553-0112F | RED | GREEN | |
| 553-0113F | RED | YELLOW | |
| 553-0118F | RED | BLUE | ** |
| 553-0120F | GREEN | BLANK | |
| 553-0121F | GREEN | RED | |
| 553-0122F | GREEN | GREEN | |
| 553-0123F | GREEN | YELLOW | |
| 553-0128F | GREEN | BLUE | ** |
| 553-0130F | YELLOW | BLANK | |
| 553-0131F | YELLOW | RED | |
| 553-0132F | YELLOW | GREEN | |
| 553-0133F | YELLOW | YELLOW | |
| 553-0181F | BLUE | RED | |
| 553-0182F | BLUE | GREEN | ** |
| 553-0188F | BLUE | BLUE | ** |
| 553-0199F | WHITE | WHITE | */** |
| 553-0201F | BLANK | RED | * |
| 553-0202F | BLANK | GREEN | * |
| 553-0203F | BLANK | YELLOW | * |
| 553-0210F | RED | BLANK | * |
| 553-0211F | RED | RED | * |
| 553-0212F | RED | GREEN | * |
| 553-0213F | RED | YELLOW | * |
| 553-0220F | GREEN | BLANK | * |
| 553-0221F | GREEN | RED | * |
| 553-0222F | GREEN | GREEN | * |
| 553-0223F | GREEN | YELLOW | * |
| 553-0230F | YELLOW | BLANK | * |
| 553-0231F | YELLOW | RED | * |
| 553-0232F | YELLOW | GREEN | * |
| 553-0233F | YELLOW | YELLOW | * |
| 553-0301F | BLANK | RED | * |
| 553-0302F | BLANK | GREEN | * |
| 553-0303F | BLANK | YELLOW | * |
| 553-0310F | RED | BLANK | * |
| 553-0311F | RED | RED | * |
| 553-0312F | RED | GREEN | * |
| 553-0313F | RED | YELLOW | * |
| 553-0320F | GREEN | BLANK | * |
| 553-0321F | GREEN | RED | * |
| 553-0322F | GREEN | GREEN | * |
| 553-0323F | GREEN | YELLOW | * |
| 553-0331F | YELLOW | RED | * |
| 553-0332F | YELLOW | GREEN | * |
| 553-0333F | YELLOW | YELLOW | * |



RECOMMENDED PC BOARD HOLE PATTERN



| REV | ECN NO | REVISIONS | DRN | CKD | APP | DATE |
|-----|--------|---------------------------------------------------------|-----|------|------|----------|
| A | — | NEW RELEASE | TWC | MES | N.O. | 8-5-05 |
| B | — | ADDED P/N 553-0181F | SM | N.O. | MES | 11-13-06 |
| C | — | CHANGED IN SIDE VIEW POS 3 TO POS 2 | SM | N.O. | MES | 11-17-06 |
| D | — | ADDED P/N 553-0199F & NOTE 4 | SM | N.O. | MES | 5-1-07 |
| E | — | OPERATING CHARACTERISTICS TABLE CORRECTED FOR WHITE LED | SM | N.O. | MES | 5-22-07 |
| F | — | UPDATED WHITE LED SPECS | KLJ | N.B. | 7/2 | 2-7-08 |

NOTE:

- *DENOTES PARTS WITH LED PROTRUSION OF $.103 \pm .013$, WITH LEADS $.018$ SQ. NOM., LED BODY $\phi .115 \pm .010$ AND THE PC BOARD RECOMMENDED HOLE SIZE IS $\phi .040 \pm .002$.
- DIALIGHT PART NUMBER: 553-0XXXF
- PIN NUMBER FOR REFERENCE ONLY, DESIGNATION NON-EXISTENT ON PARTS.
- THIS ASSEMBLY CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES (ESDS). MAINTAIN ALL PRECAUTIONARY MEASURES DURING ASSEMBLY, HANDLING AND STORAGE IN ACCORDANCE WITH IPC-A-610.



****ATTENTION**
OBSERVE PRECAUTIONS FOR
HANDLING ELECTROSTATIC
SENSITIVE DEVICES

RoHS Compliant 553-0xxxF Thru hole Bi-level CBI

Part Numbers with the "F" suffix ending are RoHS Compliant.
Example: 553-0101F, 553-0333F
The bag packaging is marked with "RoHS Compliant" label or equivalent markings.
Parts can be wave soldered, dip soldered or hand soldered using typical lead-free soldering process with max 260°C temp. for 5 sec.

| 20mA WHITE LED OPERATING CHARACTERISTICS AT $T_A = 25^\circ\text{C}$ | | | | | |
|----------------------------------------------------------------------|--------------------|------|-----|------|---------------------------------|
| SYMBOL | PARAMETER | MIN | TYP | MAX | UNITS TEST COND. |
| V_F | FORWARD VOLTAGE | | 3.2 | 3.7 | V $I_F = 20\text{mA}$ |
| I_R | | 10 | | | μA $V_R = 5\text{V}$ |
| I_V | LUMINOUS INTENSITY | 1150 | | 2500 | mc d $I_F = 20\text{mA}$ |

| BIN | LIMITS (WHITE LED) (CHROMATICITY COORDINATES) | | | |
|-----|-----------------------------------------------|-------|-------|-------|
| | X | Y | Z | U |
| 1 | 0.330 | 0.330 | 0.356 | 0.361 |
| | 0.360 | 0.318 | 0.351 | 0.385 |
| 2 | 0.287 | 0.296 | 0.330 | 0.330 |
| | 0.295 | 0.276 | 0.318 | 0.339 |
| 3 | 0.264 | 0.280 | 0.296 | 0.283 |
| | 0.267 | 0.248 | 0.276 | 0.305 |
| 4 | 0.283 | 0.287 | 0.330 | 0.330 |
| | 0.305 | 0.295 | 0.339 | 0.360 |

| 10 ma LED. OPERATING CHARACTERISTICS AT $T_A = 25^\circ\text{C}$ | | | | | | |
|------------------------------------------------------------------|--------------------|--------|-----|------|-----|--------------------------|
| SYMBOL | PARAMETER | COLOR | MIN | TYP | MAX | UNITS TEST COND. |
| V_F | FORWARD VOLTAGE | RED | | 2.0 | 3.0 | V $I_F = 10\text{mA}$ |
| | | YELLOW | | 2.1 | 3.0 | |
| | | GREEN | | 2.1 | 3.0 | |
| V_R | | ALL | 3 | | | V $I_R = 10\mu\text{A}$ |
| | | | | | | |
| λ_{PK} | PEAK WAVELENGTH | RED | | 650 | | nm MEASURED AT PEAK |
| | | YELLOW | | 585 | | |
| | | GREEN | | 563 | | |
| | | BLUE | | 428 | | |
| I_V | LUMINOUS INTENSITY | RED | 3.6 | 10.0 | | mc d $I_F = 10\text{mA}$ |
| | | YELLOW | 2.2 | 6.3 | | |
| | | GREEN | 5.6 | 16.0 | | |
| | | BLUE | 6.3 | 20 | | |

| 2 ma LOW CURRENT LED. OPERATING CHARACTERISTICS AT $T_A = 25^\circ\text{C}$ | | | | | | |
|-----------------------------------------------------------------------------|--------------------|--------|-----|-----|-----|-------------------------|
| SYMBOL | PARAMETER | COLOR | MIN | TYP | MAX | UNITS TEST COND. |
| V_F | FORWARD VOLTAGE | RED | | 1.7 | 2.2 | V $I_F = 2\text{mA}$ |
| | | YELLOW | | 1.8 | 2.7 | |
| | | GREEN | | 1.9 | 2.2 | |
| V_R | | ALL | 5 | | | V $I_R = 50\mu\text{A}$ |
| | | | | | | |
| λ_{PK} | PEAK WAVELENGTH | RED | | 635 | | nm MEASURED AT PEAK |
| | | YELLOW | | 583 | | |
| | | GREEN | | 565 | | |
| | | RED | 1.0 | 1.6 | | |
| I_V | LUMINOUS INTENSITY | YELLOW | 1.0 | 1.6 | | mc d $I_F = 2\text{mA}$ |
| | | RED | 1.0 | 1.6 | | |
| | | GREEN | 1.0 | 1.6 | | |

| 5 V., INTEGRAL RESISTOR LED OPERATING CHARACTERISTICS AT $T_A = 25^\circ\text{C}$ | | | | | | |
|-----------------------------------------------------------------------------------|--------------------|--------|-----|------|-----|--------------------------|
| SYMBOL | PARAMETER | COLOR | MIN | TYP | MAX | UNITS TEST COND. |
| V_F | FORWARD VOLTAGE | RED | | 10 | 20 | mA $V_F = 5\text{V}$ |
| | | YELLOW | | 10 | 20 | |
| | | GREEN | | 10 | 20 | |
| V_R | | ALL | 5 | | | V $I_R = 100\mu\text{A}$ |
| | | | | | | |
| λ_{PK} | PEAK WAVELENGTH | RED | | 635 | | nm MEASURED AT PEAK |
| | | YELLOW | | 585 | | |
| | | GREEN | | 565 | | |
| | | RED | 8.7 | 29 | | |
| I_V | LUMINOUS INTENSITY | YELLOW | 3.7 | 12.6 | | mc d $V_F = 5\text{V}$ |
| | | RED | 3.7 | 12.6 | | |
| | | GREEN | 5.6 | 19 | | |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----|
| SCALE: DRAWING SCALE | DRAWING NUMBER | REV |
| ALL DIM'S IN: INCHES (MM) | C-17277 | F |
| TOLERANCES: UNLESS OTHERWISE SPECIFIED | TITLE 3mm LED BI-LEVEL CBI | |
| FRACTIONS: $\pm 1/64$ | RoHS COMPLIANT | |
| DECIMALS (.XX): $\pm .02$ | MATERIAL | |
| DECIMALS (.XXX): $\pm .015$ | FINISH: | |
| DECIMALS (.XXXX): $\pm .0005$ | Dialight | |
| ANGLES: $\pm 1^\circ$ | 1501 ROUTE 34 SOUTH | |
| | FARMINGDALE, NJ 07727 | |
| FSCM 83330 | SHEET 1 OF 1 FAMILY TABLES: | |

Mouser Electronics

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