

| DATE     | REVISIONS                                   | REV |
|----------|---|-----|
| 10-24-95 | CORRECTED EMITTER/COLLECTOR PIN NUMBERING./ | A   |
| 12-22-97 | E.C.N. #10BRDR./                            | B   |

|                              |          |
|------------------------------|----------|
| DRAWING NUMBER<br>OED-ST-23G | REV<br>B |
|------------------------------|----------|

ELECTRO-OPTICAL CHARACTERISTICS  $T_A = 25^\circ\text{C}$

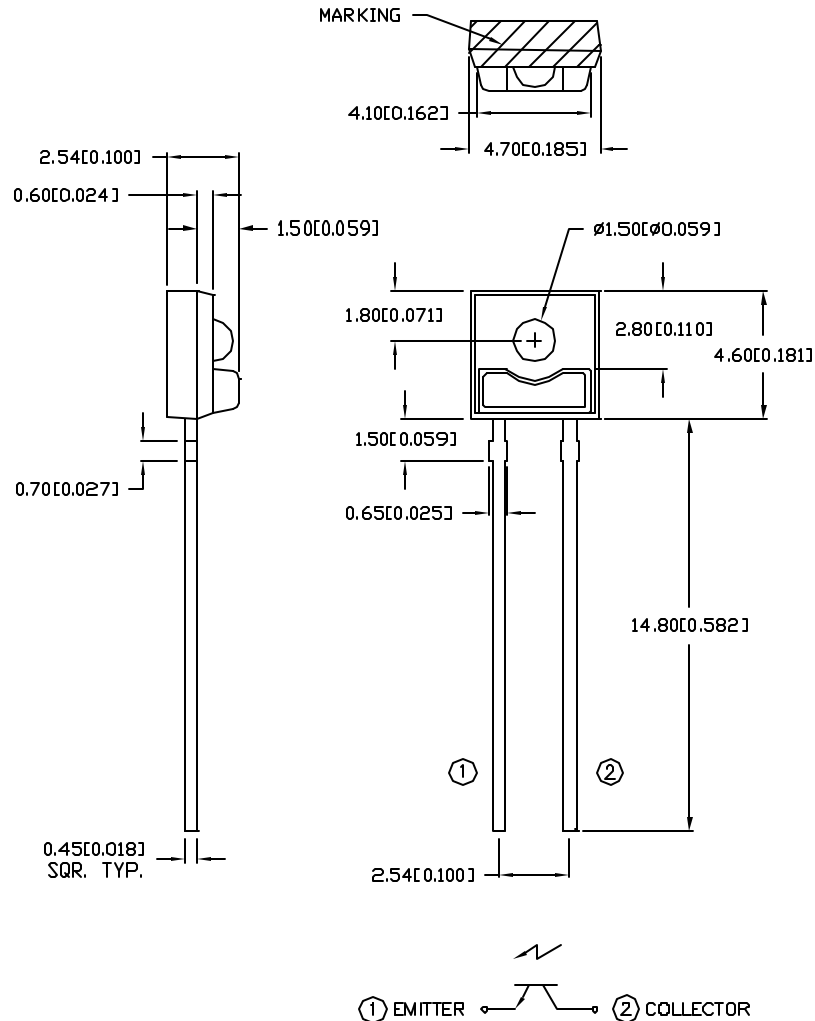
| PARAMETER                            | SYMBOL         | TEST CONDITION                                      | MIN | TYP      | MAX | UNIT          |
|--------------------------------------|----------------|---|-----|----------|-----|---------------|
| COLLECTOR DARK CURRENT               | $I_{ceo}$      | $V_{ce0} = 10\text{V}$<br>$E_e = 0.5\text{mw/cm}^2$ |     | 1        | 100 | nA            |
| COLLECTOR LIGHT CURRENT              | $I_c$          | $V_{ce} = 5\text{V}$<br>$E_e = 0.5\text{mw/cm}^2$   | 0.5 | 4.0      |     | mA            |
| COLLECTOR-EMITTER SATURATION VOLTAGE | $V_{ce(sat)}$  | $I_c = 0.2\text{mA}$<br>$E_e = 0.5\text{mw/cm}^2$   |     | 0.2      | 0.4 | V             |
| SWITCHING SPEEDS:                    |                |   |     |          |     |               |
| RISING TIME                          | $T_r$          | $V_{cc} = 5\text{V}$<br>$I_c = 1\text{mA}$          |     | 3.2      |     | $\mu\text{S}$ |
| FALLING TIME                         | $T_f$          | $R_l = 100\Omega$                                   |     | 4.8      |     | $\mu\text{S}$ |
| PEAK WAVELENGTH                      | $\lambda_p$    |   |     | 880      |     | nm            |
| ANGULAR RESPONSE                     | $\Delta\theta$ |   |     | $\pm 30$ |     | DEG           |
| LENS COLOR:                          | CLEAR          |   |     |          |     |               |

LIMITS OF SAFE OPERATION AT  $25^\circ\text{C}$

| PARAMETER                               | MAX         | UNITS            |
|---|-------------|------------------|
| COLLECTOR-EMITTER VOLTAGE ( $V_{ce0}$ ) | 30          | V                |
| EMITTER-COLLECTOR VOLTAGE ( $V_{eco}$ ) | 6           | V                |
| POWER DISSIPATION                       | 100         | mW               |
| OPERATING TEMP.                         | -20 TO +100 | $^\circ\text{C}$ |
| STORAGE TEMP.                           | -30 TO +100 | $^\circ\text{C}$ |
| SOLDERING TEMP.                         | +260        | $^\circ\text{C}$ |
| 2.0mm FROM BODY                         |             | 3 SEC. MAX       |

RELIABILITY NOTE

OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE. PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.



UNLESS OTHERWISE SPECIFIED TOLERANCE IS  $\pm 0.25\text{mm}$  ( $\pm 0.010''$ )

|   |                              |  |        |
|---|------------------------------|--|--------|
| <b>LUMEX</b><br>INCORPORATED  |                              | 290 E. HELLEN ROAD<br>PALATINE, ILLINOIS 60067<br>(847) 359-2790 |        |
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| DATE:   | 12-22-97                     | DWN:   | CHK'D: |
| SCALE:  | N/A                          |  | APPD:  |
| HIGH OUTPUT PHOTOTRANSISTOR,<br>WATER CLEAR LENS, SIDE-EMITTING.  |                              |  |        |
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