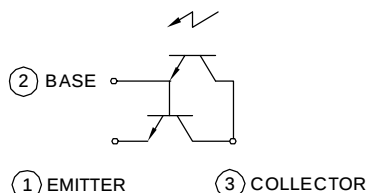
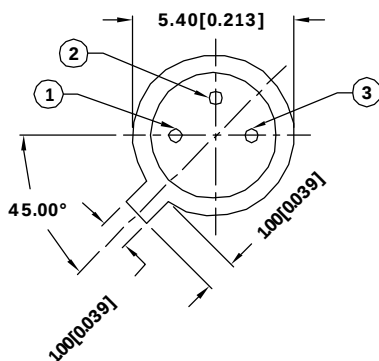
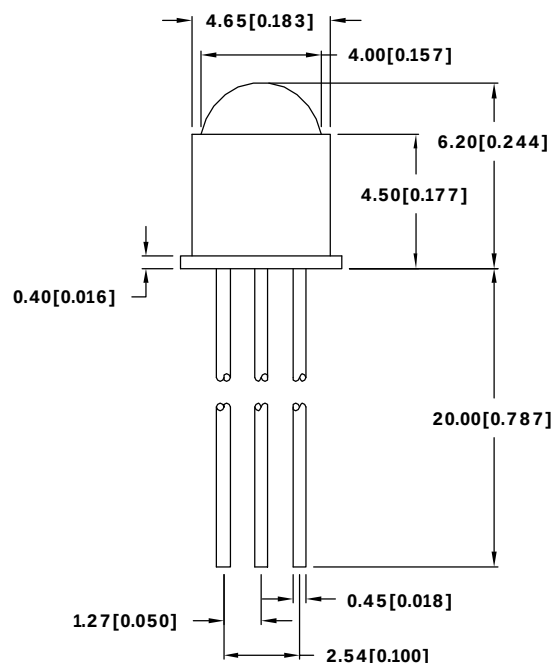


| DATE         | REVISIONS         | REV |
|--------------|-------------------|-----|
| 12 - 31 - 97 | E.C.N. #10BRDR. I | A   |

| DRAWING NUMBER  | REV |
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# ELECTRO-OPTICAL CHARACTERISTICS<sub>A</sub>T =25°C

| PARAMETER                            | SYMBOL                | TEST CONDITION                                                   | MIN | TYP | MAX | UNIT |
|--------------------------------------|-----------------------|------------------------------------------------------------------|-----|-----|-----|------|
| COLLECTOR DARK CURRENT               | I <sub>ceo</sub>      | V <sub>ceo</sub> =10V<br>E <sub>e</sub> =0.5mw/cm <sup>2</sup>   |     |     | 100 | nA   |
| COLLECTOR LIGHT CURRENT              | I <sub>c</sub>        | V <sub>ce</sub> = 5V<br>E <sub>e</sub> =0.5mw/cm <sup>2</sup>    | 5.0 |     |     | mA   |
| COLLECTOR-EMITTER SATURATION VOLTAGE | V <sub>ce</sub> (sat) | I <sub>c</sub> = 0.2 mA<br>E <sub>e</sub> =0.5mw/cm <sup>2</sup> |     |     | 1.4 | V    |
| SWITCHING SPEEDS:                    |                       | V <sub>cc</sub> =5V                                              |     |     |     |      |
| RISING TIME                          | T <sub>r</sub>        | I <sub>c</sub> =1mA                                              |     | 65  |     | μS   |
| FALLING TIME                         | T <sub>f</sub>        | R <sub>i</sub> =100Ω                                             |     | 75  |     | μS   |
| PEAK WAVELENGTH                      | λ <sub>p</sub>        |                                                                  |     | 800 |     | nm   |
| ANGULAR REPSONSE                     | Δθ                    |                                                                  |     | ±15 |     | DEG  |
| LENS COLOR:                          | CLEAR                 |                                                                  |     |     |     |      |



## LIMITS OF SAFE OPERATION AT 25°C

| PARAMETER                                     | MAX         | UNITS |
|-----------------------------------------------|-------------|-------|
| COLLECTOR-EMITTER VOLTAGE (V <sub>ceo</sub> ) | 30          | V     |
| EMITTER-COLLECTOR VOLTAGE (V <sub>eco</sub> ) | 4           | V     |
| POWER DISSIPATION                             | 100         | mW    |
| OPERATING TEMP.                               | -30 TO +120 | °C    |
| STORAGE TEMP.                                 | -30 TO +125 | °C    |
| SOLDERING TEMP.                               | +260        | °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.

④

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|                   |      |        |       |
|-------------------|------|--------|-------|
| DATE: 4 - 27 - 95 | DWN: | CHK'D: | APPD: |
| SCALE: N/A        |      |        |       |

**TO - 18 HIGH OUTPUT, NPN SILICON PHOTODARLINGTON,  
HERMETICALLY SEALED.**

|             |                                   |          |
|-------------|-----------------------------------|----------|
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