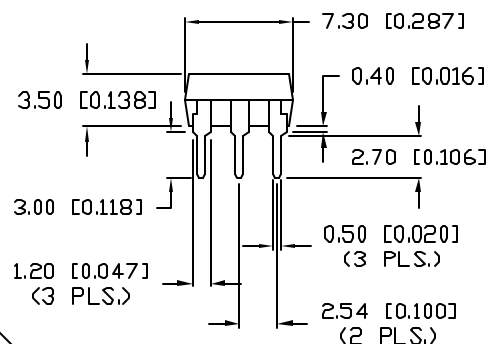
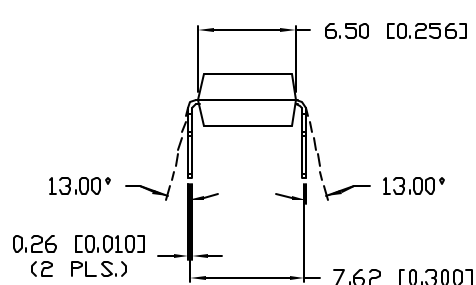


## NOTES:

1. ANODE
2. CATHODE
3. NO CONNECT
4. EMITTER
5. COLLECTOR
6. BASE

ELECTRO-OPTICAL CHARACTERISTICS (T<sub>a</sub>=25°C)

|   | PARAMETER                            | SYMBOL               | CONDITIONS                                                       | MIN                | TYP              | MAX              | UNITS |
|---|--------------------------------------|----------------------|------------------------------------------------------------------|--------------------|------------------|------------------|-------|
| I | FORWARD VOLTAGE                      | V <sub>F</sub>       | I <sub>F</sub> =20mA                                             | -                  | 1.2              | 1.4              | V     |
|   | PEAK FORWARD VOLTAGE                 | V <sub>FM</sub>      | I <sub>FM</sub> =0.5A                                            | -                  | -                | 3.5              | V     |
|   | REVERSE CURRENT                      | I <sub>R</sub>       | V <sub>R</sub> =4V                                               | -                  | -                | 10               | μA    |
|   | TERMINAL CAPACITANCE                 | C <sub>t</sub>       | V=0, f=1kHz                                                      | -                  | 30               | -                | pF    |
| O | COLLECTOR DARK CURRENT               | I <sub>CEO</sub>     | V <sub>CE</sub> =20V                                             | -                  | -                | 10 <sup>-7</sup> | A     |
| T | CURRENT TRANSFER RATIO               | CRT                  | I <sub>F</sub> =2mA, V <sub>CE</sub> =5V                         | 60                 | -                | 600              | %     |
|   | COLLECTOR-EMITTER SATURATION VOLTAGE | V <sub>CE(sat)</sub> | I <sub>F</sub> =20mA, I <sub>C</sub> =1mA                        | -                  | 0.1              | 0.3              | V     |
|   | ISOLATION RESISTANCE                 | R <sub>ISO</sub>     | DC500V                                                           | 5x10 <sup>10</sup> | 10 <sup>11</sup> | -                | ohm   |
|   | FLOATING CAPACITANCE                 | C <sub>f</sub>       | V=0, f=1MHz                                                      | -                  | 0.6              | 1.0              | pF    |
|   | CUT-OFF FREQUENCY                    | f <sub>c</sub>       | V <sub>CE</sub> =5V, I <sub>C</sub> =2mA, R <sub>L</sub> =100ohm | -                  | 80               | -                | kHz   |
|   | RESPONSE TIME (RISE)                 | t <sub>r</sub>       | V <sub>CE</sub> =5V, I <sub>C</sub> =2mA, R <sub>L</sub> =100ohm | -                  | 5                | 20               | μS    |
|   | RESPONSE TIME (FALL)                 | t <sub>f</sub>       | V <sub>CE</sub> =5V, I <sub>C</sub> =2mA, R <sub>L</sub> =100ohm | -                  | 4                | 20               | μS    |

I=INPUT, O=OUTPUT, T=TRANSFER CHARACTERISTICS.

\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030), MIN.=<sup>+DECIMAL PRECISION</sup><sub>-0.00</sub>, MAX.=<sup>+0.00</sup><sub>-DECIMAL PRECISION</sub>

| ABSOLUTE MAXIMUM RATINGS (T <sub>a</sub> =25°C) |                  |             |       |  |
|-------------------------------------------------|------------------|-------------|-------|--|
| PARAMETER                                       | SYMBOL           | MAX         | UNITS |  |
| FORWARD CURRENT                                 | I <sub>F</sub>   | 50          | mA    |  |
| PEAK FORWARD CURRENT                            | I <sub>FM</sub>  | 1           | A     |  |
| REVERSE VOLTAGE                                 | V <sub>R</sub>   | 6           | V     |  |
| POWER DISSIPATION                               | P <sub>D</sub>   | 70          | mW    |  |
| COLLECTOR-EMITTER VOLTAGE                       | V <sub>CEO</sub> | 60          | V     |  |
| EMITTER-COLLECTOR VOLTAGE                       | V <sub>ECO</sub> | 6           | V     |  |
| COLLECTOR-BASE VOLTAGE                          | V <sub>CB0</sub> | 60          | V     |  |
| EMITTER-BASE VOLTAGE                            | V <sub>EB0</sub> | 6           | V     |  |
| COLLECTOR CURRENT                               | I <sub>C</sub>   | 50          | mA    |  |
| COLLECTOR POWER DISSIPATION                     | P <sub>C</sub>   | 150         | mW    |  |
| TOTAL POWER DISSIPATION                         | P <sub>tot</sub> | 200         | mW    |  |
| ISOLATION VOLTAGE 1 MIN.                        | V <sub>ISO</sub> | 5000        | V RMS |  |
| OPERATING TEMPERATURE                           | T <sub>opr</sub> | -30 TO +100 | °C    |  |
| STORAGE TEMPERATURE                             | T <sub>stg</sub> | -55 TO +125 | °C    |  |
| SOLDERING TEMPERATURE                           | T <sub>sol</sub> | +260        | °C    |  |
| 2.0mm FROM BODY                                 |                  | 10 SEC. MAX |       |  |

I=INPUT, O=OUTPUT.

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## 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.



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SIX PIN DIP SINGLE CHANNEL PHOTOCOUPLER,  
TRANSISTOR OUTPUT WITH EXTERNAL BASE CONNECTION.

|                 |             |              |               |
|-----------------|-------------|--------------|---------------|
| DRAWN BY:<br>JC | CHECKED BY: | APPROVED BY: | DATE: 9.29.99 |
|                 |             |              | PAGE: 1 OF 1  |
|                 |             |              | SCALE: N/A    |