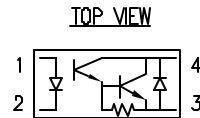
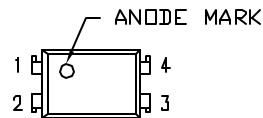


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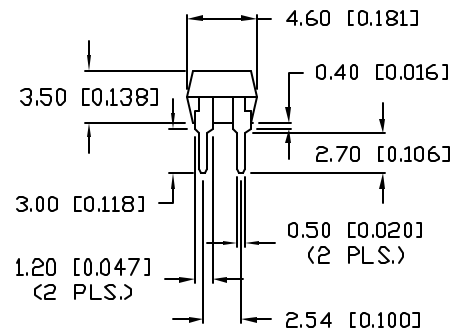
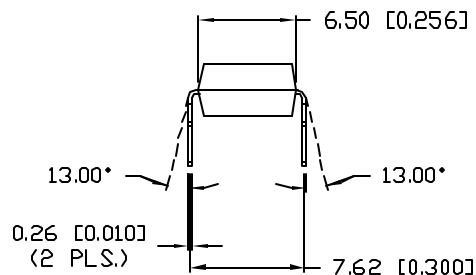
PART NUMBER  
OCP-PCD114/EREV.  
B

| REV. | E.C.N. NUMBER AND REVISION COMMENTS | DATE    |
|------|-------------------------------------|---------|
| A    | E.C.N. #10BRDR. & #10776.           | 8.16.01 |
| B    | E.C.N. #11148.                      | 5.15.07 |



NOTES:

1. ANODE
2. CATHODE
3. EMITTER
4. COLLECTOR



ELECTRO-OPTICAL CHARACTERISTICS (Ta=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    |
| Q | COLLECTOR DARK CURRENT               | I <sub>CEO</sub>     | V <sub>CE</sub> =200V, I <sub>F</sub> =0                          | -                  | -   | 10 <sup>-8</sup> | A     |
| T | CURRENT TRANSFER RATIO               | CRT                  | I <sub>F</sub> =1mA, V <sub>CE</sub> =2V                          | 600                | -   | 9000             | %     |
|   | COLLECTOR-EMITTER SATURATION VOLTAGE | V <sub>CE(sat)</sub> | I <sub>F</sub> =20mA, I <sub>C</sub> =5mA                         | -                  | -   | 1.5              | V     |
|   | ISOLATION RESISTANCE                 | R <sub>ISO</sub>     | DC500V                                                            | 5x10 <sup>10</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  | -                  | 7   | -                | kHz   |
|   | RESPONSE TIME (RISE)                 | t <sub>r</sub>       | V <sub>CE</sub> =2V, I <sub>C</sub> =20mA, R <sub>L</sub> =100ohm | -                  | 60  | 300              | μs    |
|   | RESPONSE TIME (FALL)                 | t <sub>f</sub>       | V <sub>CE</sub> =2V, I <sub>C</sub> =20mA, R <sub>L</sub> =100ohm | -                  | 50  | 250              | μs    |

I=INPUT, Q=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 (Ta=25°C)

|   | PARAMETER                   | SYMBOL           | MAX         | UNITS |
|---|-----------------------------|------------------|-------------|-------|
| I | FORWARD CURRENT             | I <sub>F</sub>   | 50          | mA    |
|   | PEAK FORWARD CURRENT        | I <sub>FM</sub>  | 1           | A     |
|   | REVERSE VOLTAGE             | V <sub>R</sub>   | 5           | V     |
|   | POWER DISSIPATION           | P <sub>D</sub>   | 70          | mW    |
| Q | COLLECTOR-EMITTER VOLTAGE   | V <sub>CEO</sub> | 300         | V     |
|   | EMITTER-COLLECTOR VOLTAGE   | V <sub>ECQ</sub> | 0.1         | V     |
|   | COLLECTOR CURRENT           | I <sub>C</sub>   | 150         | mA    |
|   | COLLECTOR POWER DISSIPATION | P <sub>C</sub>   | 200         | mW    |
|   | TOTAL POWER DISSIPATION     | P <sub>tot</sub> | 200         | mW    |
|   | ISOLATION VOLTAGE 1 MIN.    | V <sub>ISO</sub> | 5000        | Vrms  |
|   | OPERATING TEMP.             | T <sub>opr</sub> | -30 TO +100 | °C    |
|   | STORAGE TEMP.               | T <sub>stg</sub> | -55 TO +125 | °C    |
|   | SOLDERING TEMP.             | T <sub>sol</sub> | +260        | °C    |
|   | 2.0mm FROM BODY             |                  | 10 SEC. MAX |       |

I=INPUT, Q=OUTPUT.

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REV.  
BPART NUMBER  
OCP-PCD114/EFOUR PIN DIP SINGLE CHANNEL PHOTOCOUPLER,  
PHOTODARLINGTON OUTPUT, NO EXTERNAL BASE CONNECTION.

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