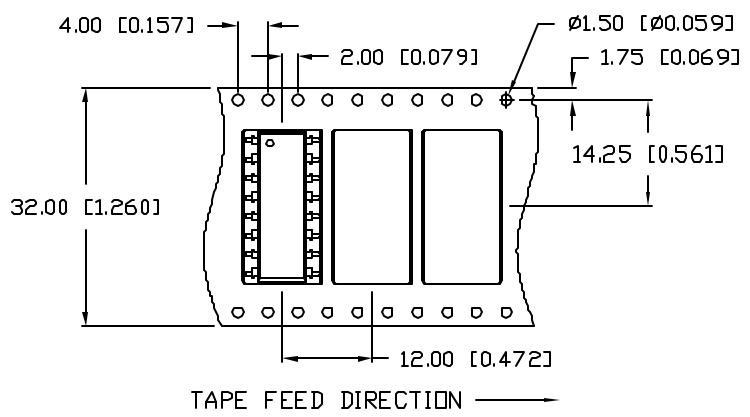
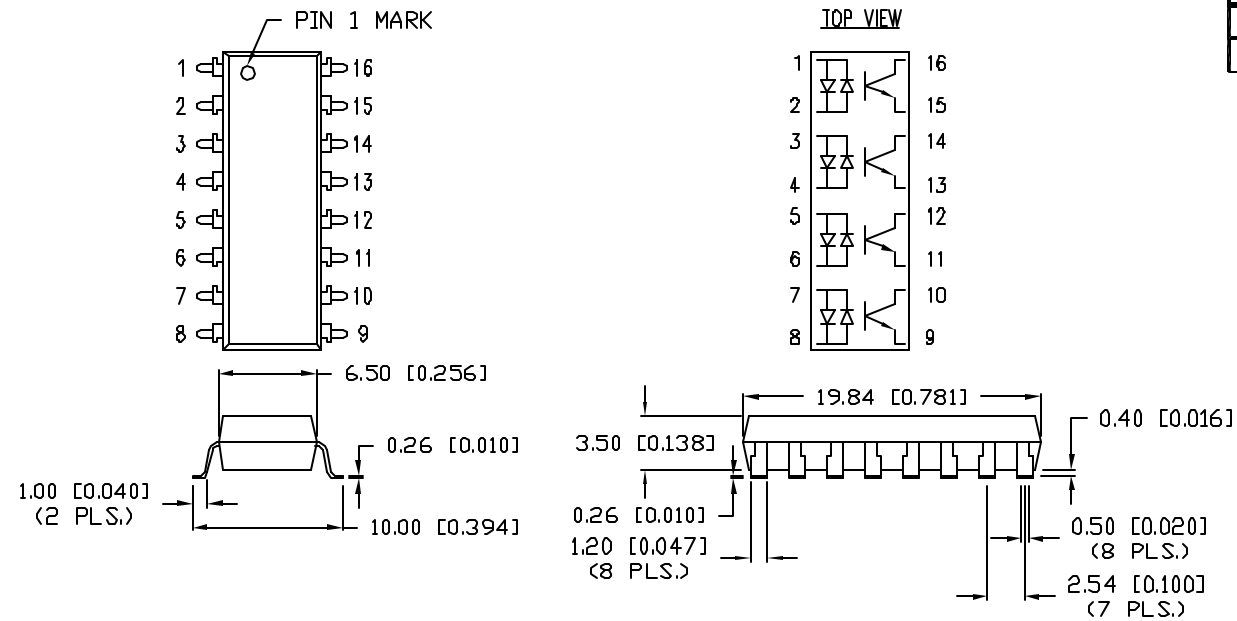


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| OCP-PCT4216/A-TR1 |                                     | A       |
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| A                 | E.C.N. #11148.                      | 5.16.07 |



- NOTES:
- 1,3,5,7. ANODE/CATHODE
  - 2,4,6,8. CATHODE/ANODE
  - 9,11,13,15. EMITTER
  - 10,12,14,16. COLLECTOR



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16 PIN SURFACE MOUNT QUAD CHANNEL PHOTOCOUPLER,  
 BIPOLAR INPUT, TRANSISTOR OUTPUT,  
 WITHOUT EXTERNAL BASE CONNECTION.

**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.

|           |             |              |                |
|-----------|-------------|--------------|----------------|
| DRAWN BY: | CHECKED BY: | APPROVED BY: | DATE: 10.11.01 |
| JC        |             |              | PAGE: 1 OF 2   |
|           |             |              | SCALE: N/A     |

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|                   | SEE PAGE #1                         |      |

| 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     |
|  | TERMINAL CAPACITANCE                 | C <sub>t</sub>       | V=0, f=1kHz  | -                  | 30               | -                | pF    |
| Q  | COLLECTOR DARK CURRENT               | I <sub>CQ</sub>      | V <sub>CE</sub> =20V, I <sub>F</sub> =0                          | -                  | -                | 10 <sup>-7</sup> | A     |
| T  | CURRENT TRANSFER RATIO               | CRT                  | I <sub>F</sub> =±1mA, 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> =2V, I <sub>C</sub> =2mA, R <sub>L</sub> =100ohm | -                  | 5                | 20               | μS    |
|  | RESPONSE TIME (FALL)                 | t <sub>f</sub>       | V <sub>CE</sub> =2V, I <sub>C</sub> =2mA, R <sub>L</sub> =100ohm | -                  | 4                | 20               | μS    |


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

| ABSOLUTE MAXIMUM RATINGS (T <sub>a</sub> =25°C) |                             |                  |             |                  |
|---|-----------------------------|------------------|-------------|------------------|
|   | PARAMETER                   | SYMBOL           | MAX         | UNITS            |
| I   | FORWARD CURRENT             | I <sub>F</sub>   | ±50         | mA               |
|   | PEAK FORWARD CURRENT        | I <sub>FM</sub>  | ±1          | A                |
|   | POWER DISSIPATION           | P <sub>D</sub>   | 70          | mW               |
| Q   | COLLECTOR-EMITTER VOLTAGE   | V <sub>CEO</sub> | 60          | V                |
|   | EMITTER-COLLECTOR VOLTAGE   | V <sub>ECQ</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 <sub>RMS</sub> |
|   | 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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|   |                   | jc   |             | DATE: 10.11.01<br>PAGE: 2 OF 2<br>SCALE: N/A  |