

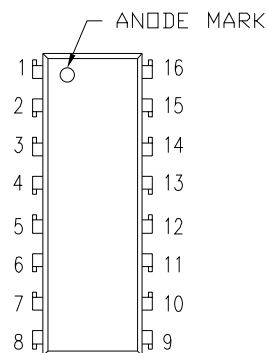
UNCONTROLLED DOCUMENT

PART NUMBER  
OCP-PCT4216/X

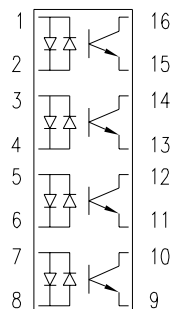
REV.

REV. E.C.N. NUMBER AND REVISION COMMENTS

DATE



TOP VIEW



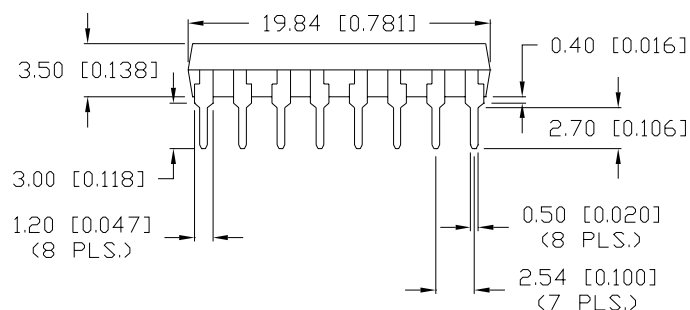
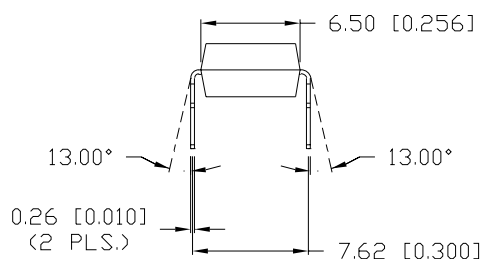
NOTES:

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

CAUTION: STATIC SENSITIVE DEVICE  
FOLLOW PROPER E.S.D. HANDLING PROCEDURES  
WHEN WORKING WITH THIS PART.

PART NUMBER TABLE

| PART= | /X | CTR (%)   |
|-------|----|-----------|
| /A    |    | 60 TO 600 |
| /B    |    | 60 TO 300 |



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     |
| 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, 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, O=OUTPUT, T=TRANSFER CHARACTERISTICS.

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     |
| POWER DISSIPATION           | P <sub>d</sub>   | 70          | mW    |
| O COLLECTOR-EMITTER VOLTAGE | V <sub>CEO</sub> | 60          | V     |
| EMITTER-COLLECTOR VOLTAGE   | V <sub>ECO</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 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, O=OUTPUT.

UNCONTROLLED DOCUMENT

\*UNLESS OTHERWISE SPECIFIED TOLERANCE IS ±0.25mm (±0.010")

REV.

PART NUMBER

OCP-PCT4216/X

SIXTEEN PIN DIP QUAD CHANNEL PHOTOCOUPLER,  
BIPOLAR INPUT, TRANSISTOR OUTPUT,  
WITHOUT EXTERNAL BASE CONNECTION.

CONFIDENTIAL INFORMATION

THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE PROPERTY OF LUMEX INC. EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY LUMEX INC., THE HOLDER OF THIS DOCUMENT SHALL KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.

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.

**LUMEX**  
INCORPORATED

290 E. HELLEN ROAD  
PALATINE, ILLINOIS 60067  
PHONE: 1-847-359-2790  
WEB: HTTP://WWW.LUMEX.COM

DRAWN BY: CHECKED BY: APPROVED BY: DATE: 9-29-99

CK/DU

PAGE: 1 OF 1

SCALE: N/A