# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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#### OPTICALLY COUPLED BILATERAL SWITCH LIGHTACTIVATED ZERO VOLTAGE CROSSING TRIAC



#### "X" SPECIFICATION APPROVAL

- VDE 0884 in 3 available lead forms :-- STD
- -GForm(10.16pitch)
- SMD approved to CECC000802

#### DESCRIPTION

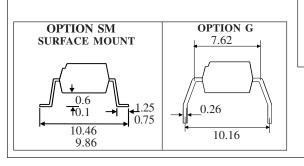
The MOC308\_Series are optically coupled isolators consisting of a Gallium Arsenide infrared emitting diode coupled with a monolithic silicon detector performing the functions of a zero crossing bilateral triac mounted in a standard 6 pin dual-in-line package.

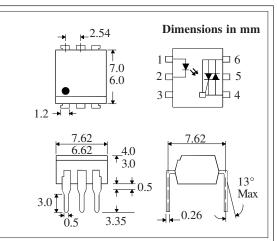
#### FEATURES

- Options :-10mm lead spread - add G after part no. Surface mount - add SM after part no. Tape&reel - add SMT&R after part no.
- High Isolation Voltage, 5.3kV<sub>RMS</sub>
- Zero Voltage Crossing
- 800V Peak Blocking Voltage
- All electrical parameters 100% tested
- Custom electrical selections available

#### APPLICATIONS

- CRTs
- Power Triac Driver
- Motors
- Consumer appliances
- Printers





### ABSOLUTE MAXIMUM RATINGS (25 °C unless otherwise noted)

| Storage Temperature            | -55°C-+125°C |
|--------------------------------|--------------|
| Operating Temperature          | -30°C-+100°C |
| Lead Soldering Temperature     | 260°C        |
| (1.6mm from case for 10 second | ds)          |

#### INPUTDIODE

| Forward Current | 50mA |
|-----------------|------|
| Reverse Voltage | 6V   |

#### OUTPUTPHOTOTRIAC

| RMS on-state current         | 0.1A |
|------------------------------|------|
| Peak one cycle surge current |      |
| (50Hz sine wave)             | 1.2A |
| Peak Off-State Voltage       | 800V |

#### **ISOCOM COMPONENTS LTD**

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|  | PARAMETER  | MIN  | ТҮР | MAX                 | UNITS                            | TEST CONDITION  |
|--|--|------|-----|---------------------|----------------------------------|---|
| Input                                    | Forward Voltage ( $V_F$ )<br>Reverse Current ( $I_R$ )   |      | 1.2 | 1.4<br>10           | V<br>µA                          | I <sub>F</sub> =20mA<br>V <sub>R</sub> =6V  |
| Output                                   | Peak Off-state Current ( $I_{DRM}$ )<br>Peak Blocking Voltage ( $V_{DRM}$ )<br>On-state Voltage ( $V_{TM}$ ) | 800  |     | 500<br>3.0          | nA<br>V<br>V                     | $V_{DRM} = 800V \text{ (note 1)}$ $I_{DRM} = 500nA$ $I_{TM} = 100mA \text{ (peak)}$ |
|  | Critical rate of rise of<br>off-state Voltage ( dv/dt )  | 600  |     |                     | V/µs                             |   |
| Coupled                                  | Input Current to Trigger (I <sub>FT</sub> )(note 2)<br>MOC3080<br>MOC3081<br>MOC3082<br>MOC3083              |      |     | 30<br>15<br>10<br>5 | mA<br>mA<br>mA<br>mA             | $V_{TM} = 3V (note 2)$  |
|  | Holding Current , either direction ( $I_{\rm H})$ Input to Output Isolation Voltage $V_{\rm ISO}$            | 5300 | 400 |                     | $\substack{\mu A \\ V_{_{RMS}}}$ | See note 3  |
| Zero<br>Crossing<br>Charact-<br>-eristic | Inhibit Voltage (V <sub>IH</sub> )   |      |     | 20                  | V                                | $I_F = Rated I_{FT}$<br>MT1-MT2 Voltage<br>above which device<br>will not trigger   |

#### ELECTRICAL CHARACTERISTICS ( $T_A = 25^{\circ}C$ Unless otherwise noted)

Note 1. Guaranteed to trigger at an I<sub>F</sub> value less than or equal to max. I<sub>FT</sub>, recommended I<sub>F</sub> lies between Rated I<sub>FT</sub> and absolute max. I<sub>F</sub>. Note 2. Measured with input leads shorted together and output leads shorted together.