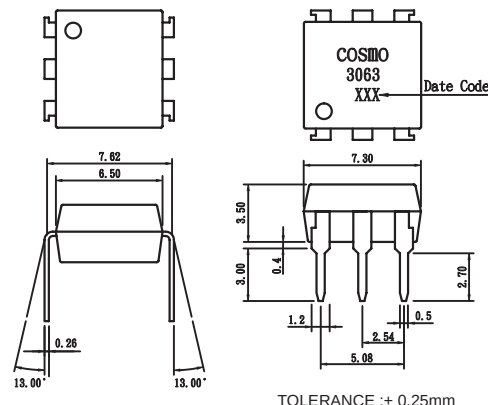


## For 115/240 Vac (rms) Application:

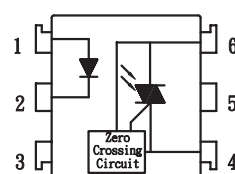
1. Solenoid/Valve Controls
2. Lighting Controls
3. Static Power Switches
4. Ac Motor Drives
5. Temperature Controls
6. E.M. Contactors
7. Ac Motor Starters
8. Solid State Relays
9. Available package : DIP/ SMD/ H.

(For Package Dimension please refer to page 82 )

## Outside Dimension : Unit (mm)



## Schematic : Top View



1. Anode
2. Cathode
3. NC
4. MAIN TERMINAL
5. SUBSTRATE DO NOT CONNECT
6. MAIN TERMINAL

## Absolute Maximum Ratings

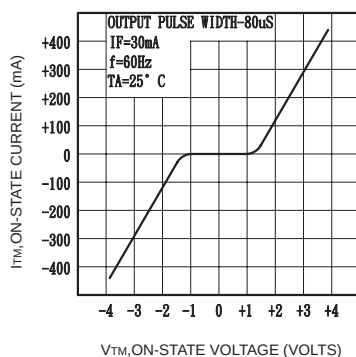
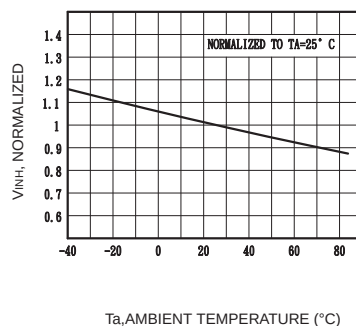
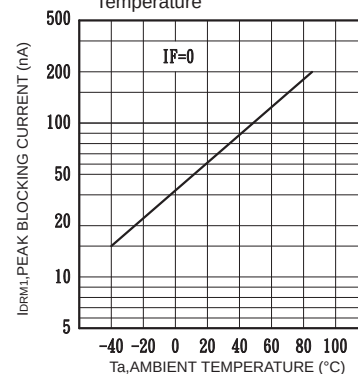
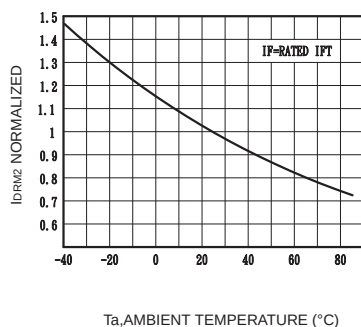
(Ta=25°C)

| Parameter                        | Symbol                            | Rating | Unit        |
|----------------------------------|-----------------------------------|--------|-------------|
| Input                            | Forward current                   | IF     | 50          |
|                                  | Peak forward current              | IFM    | 1           |
|                                  | Reverse voltage                   | VR     | 6           |
|                                  | Power dissipation                 | PD     | 70          |
| Output                           | Off-State Output Terminal voltage | VDRM   | 600         |
|                                  | Peak Repetitive Surget Current    | ITSM   | 1           |
|                                  | Power dissipation                 | PD     | 300         |
| Total power dissipation          |                                   | Ptot   | 330         |
| Isolation voltage 1 minute       |                                   | Viso   | 5000        |
| Operating temperature            |                                   | Topr   | -40 to +80  |
| Storage temperature              |                                   | Tstg   | -40 to +125 |
| Soldering temperature 10 seconds |                                   | Tsol   | 260         |

## Electro-optical Characteristics

(Ta=25°C)

| Parameter                | Symbol                                                            | Conditions                           | MIN.               | TYP.             | MAX. | Unit |
|--------------------------|-------------------------------------------------------------------|--------------------------------------|--------------------|------------------|------|------|
| Input                    | Forward voltage                                                   | IF =10mA                             | —                  | 1.2              | 1.5  | V    |
|                          | Reverse Leakage Current                                           | VR =4V                               | —                  | —                | 10   | UA   |
| Output                   | Peak Blocking Current                                             | VDRM =Rated                          | —                  | 60               | 500  | nA   |
|                          | ON-State Voltage                                                  | ITM =100mA                           | —                  | 1.8              | 3    | V    |
|                          | Critical rate of rise of OFF-state voltage                        |                                      | 100                | —                | —    | V/uS |
| Transfer characteristics | Holding Current                                                   |                                      | —                  | 100              | —    | uA   |
|                          | Inhibit Voltage (MT1-MT2 Voltage above which device not trigger.) | IF =5mA                              | —                  | 5                | 20   | V    |
|                          | Leakage in Inhibited State                                        | IF =Rated IFT, Rated VDRM, Off State | —                  | —                | 500  | uA   |
|                          | Isolation resistance                                              | DC500V                               | 5x10 <sup>10</sup> | 10 <sup>11</sup> | —    | ohm  |
|                          | Minimum trigger current                                           | Main Terminal Voltage=3V             | —                  | —                | 5    | mA   |

**Fig.1** On-State Characteristics

**Fig.2** Inhibit Voltage versus Temperature

**Fig.3** Leakage with LED Off versus Temperature

**Fig.4**  $I_{DRM2}$ , Leakage in Inhibit State versus Temperature

**Fig.5** Trigger Current versus Temperature
