

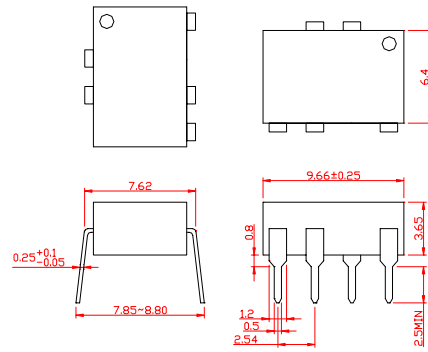
● **Features :**

1. Compact dual-in-line Package.
2. 600V peak blocking voltage.
3. Isolation voltage between input and output 2500Vrms.

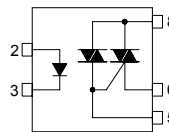
● **Application :**

1. TRIAC Driver.
2. Programmable Controllers.
3. AC-Output Module.
4. Solid State Relay.

● **Outside Dimension : Unit ( mm )**



● **Schematic : Top View**



- 2 : Anode
- 3 : Cathode
- 5 : TRIAC Gate
- 6 : TRIAC T1
- 8 : TRIAC T2

● **Absolute Maximum Ratings : ( Ta=25°C )**

| CHARACTERISTIC                                   |   | SYMBOL                        | RATING           | UNIT                 |
|--|---|-------------------------------|------------------|----------------------|
| Input  | Forward Current   | $I_F$                         | 50               | mA                   |
|  | Forward Current Derating ( $T_a \geq 53^\circ\text{C}$ )              | $\Delta I_F / ^\circ\text{C}$ | -0.7             | mA/ $^\circ\text{C}$ |
|  | Peak Forward Current ( 100 $\mu\text{s}$ pulse, 100pps )              | $I_{FP}$                      | 1                | A                    |
|  | Reverse Voltage   | $V_R$                         | 5                | V                    |
|  | Junction Temperature  | $T_j$                         | 125              | $^\circ\text{C}$     |
| Output   | Off-State Output Terminal Voltage                                     | $V_{DRM}$                     | 600              | V                    |
|  | On-State RMS Current  | $T_a=40^\circ\text{C}$        | 1                | A                    |
|  |   | $T_a=60^\circ\text{C}$        | 0.35             |                      |
|  | On-State Current Derating ( $T_a \geq 40^\circ\text{C}$ )             | $\Delta I_T / ^\circ\text{C}$ | -7.2             | mA/ $^\circ\text{C}$ |
|  | Peak Current from Snubber Circuit ( 100 $\mu\text{s}$ pulse, 120pps ) | $I_{SP}$                      | 2                | A                    |
|  | Peak Nonrepetitive Surge Current ( 50Hz, Peak )                       | $I_{TSM}$                     | 5                | A                    |
| Junction Temperature                             | $T_j$   | 110                           | $^\circ\text{C}$ |                      |
| Storage Temperature Range                        |   | $T_{stg}$                     | -40~125          | $^\circ\text{C}$     |
| Operating Temperature Range                      |   | $T_{opr}$                     | -20~80           | $^\circ\text{C}$     |
| Lead Soldering Temperature ( 10s )               |   | $T_{sol}$                     | 260              | $^\circ\text{C}$     |
| Isolation Voltage ( AC, 1min., R.H. $\leq$ 60% ) |   | $BV_S$                        | 2500             | Vrms                 |

● **Electro-optical characteristics :**

| CHARACTERISTIC    | SYMBOL                                       | TEST CONDITION      | MIN.   | TYP.               | MAX.      | UNIT |                  |
|-------------------|--|---------------------|--|--------------------|-----------|------|------------------|
| Input             | Forward Voltage                              | $V_F$               | $I_F=10\text{mA}$                            | 1.0                | 1.15      | 1.3  | V                |
|                   | Reverse Current                              | $I_R$               | $V_R=5\text{V}$                              | -                  | -         | 10   | $\mu\text{A}$    |
|                   | Capacitance                                  | $C_T$               | $V=0, f=1\text{MHz}$                         | -                  | 30        | -    | pF               |
| Output            | Peak Off-State Current                       | $I_{DRM}$           | $V_{DRM}=600\text{V}, T_a=110^\circ\text{C}$ | -                  | -         | 100  | $\mu\text{A}$    |
|                   | Peak On-State Voltage                        | $V_{TM}$            | $I_{TM}=0.75\text{A}$                        | -                  | -         | 3.0  | V                |
|                   | Holding Current                              | $I_H$               | $R_L=100\Omega$                              | -                  | -         | 25   | mA               |
|                   | Critical Rate of Rise of Off-State Voltage   | $dv/dt$             | $V_{in}=240\text{Vrms}$                      | -                  | 500       | -    | V/ $\mu\text{s}$ |
|                   | Critical Rate of Rise of Commutating Voltage | $dv/dt(c)$          | $V_{in}=240\text{Vrms}, I_T=1\text{Arms}$    | -                  | 5         | -    | V/ $\mu\text{s}$ |
| Transfer          | Trigger LED Current                          | $I_{FT}$            | $V_T=6\text{V}$                              | -                  | -         | 10   | mA               |
|                   | Capacitance ( Input to Output )              | $C_S$               | $V_S=0, f=1\text{MHz}$                       | -                  | 1.5       | -    | pF               |
|                   | Isolation Resistance                         | $R_S$               | $V_S=500\text{V}$                            | $5 \times 10^{10}$ | $10^{14}$ | -    | $\Omega$         |
|                   |  |                     | AC, 1minute                                  | 2500               | -         | -    |                  |
|                   |  |                     | DC, 1minute, in oil                          | -                  | 5000      | -    |                  |
| Isolation Voltage | $BV_S$                                       | AC, 1second, in oil | -  | 5000               | -         | Vrms |                  |