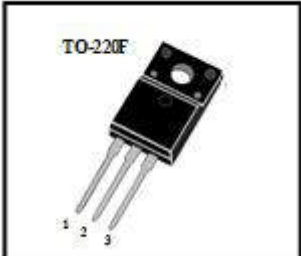
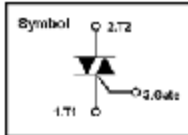


## Product profile

- Triac in a TO-220F plastic package.
- Solid-state switch
- Microwave
- Duplicator
- $V_{DRM} \geq 600\text{ V}$
- $I_{GT} = 30\text{ mA}$
- $I_T = 8\text{ A}$
- $V_{ISO} = 1500\text{ V}$

## Pinning information

| Pin | Description | Simplified outline  | Symbol  |
|-----|-------------|---|---|
| 1   | T1          |  |  |
| 2   | T2          |   |   |
| 3   | Gate        |   |   |

## Limiting values

| Symbol            | Parameter                            | Conditions                | Min  | Max | Unit |
|-------------------|--------------------------------------|---------------------------|------|-----|------|
| $T_{stg}$         | Storage temperature                  |                           | -40  | 125 | °C   |
| $T_j$             | Junction Temperature                 |                           | -40  | 125 | °C   |
| $V_{DRM}$         | Repetitive peak off-state voltage    |                           | 600  |     | V    |
| $I_T(\text{RMS})$ | RMS on-state current                 | ( $T_a = 107\text{ °C}$ ) | 8    |     | A    |
| $V_{GM}$          | Peak gate voltage                    |                           | 10   |     | V    |
| $I_{GM}$          | Peak gate current                    |                           | 2    |     | A    |
| $V_{ISO}$         | Breakdown voltage (RMS, AC 1 minute) |                           | 1500 |     | V    |

**Characteristics**

*T<sub>J</sub> = 25 °C unless otherwise specified.*

| Symbol               | Parameter                                  | Conditions   | Min | Typ | Max | Unit |
|----------------------|--|--|-----|-----|-----|------|
| I <sub>DRM</sub>     | Repetitive peak off-state current          | V <sub>D</sub> = V <sub>DRM</sub> , single-phase, half wave, T <sub>J</sub> = 125 °C |     |     | 2   | mA   |
| V <sub>TM</sub>      | Peak on-state voltage                      | I <sub>T</sub> = 20A, fast measurements  |     |     | 1.4 | V    |
| I <sub>+GT1</sub>    | Gate Trigger Current                       | V <sub>D</sub> =6V, R <sub>L</sub> =10 ohm   |     |     | 30  | mA   |
| I <sub>-GT1</sub>    | Gate Trigger Current                       | V <sub>D</sub> =6V, R <sub>L</sub> =10 ohm   |     |     | 30  | mA   |
| I <sub>-GT3</sub>    | Gate Trigger Current                       | V <sub>D</sub> =6V, R <sub>L</sub> =10 ohm   |     |     | 30  | mA   |
| V <sub>+GT1</sub>    | Gate trigger voltage                       | V <sub>D</sub> =6V, R <sub>L</sub> =10 ohm   |     |     | 1.5 | V    |
| V <sub>-GT1</sub>    | Gate trigger voltage                       | V <sub>D</sub> =6V, R <sub>L</sub> =10 ohm   |     |     | 1.5 | V    |
| V <sub>-GT3</sub>    | Gate trigger voltage                       | V <sub>D</sub> =6V, R <sub>L</sub> =10 ohm   |     |     | 1.5 | V    |
| V <sub>GD</sub>      | Does not trigger the gate voltage          | T <sub>J</sub> =125 °C, V <sub>D</sub> =1/2V <sub>DRM</sub>                          | 0.2 |     |     | V    |
| (dv/dt) <sub>c</sub> | Critical rate of rise of off-state voltage | (di/dt) <sub>c</sub> =-6.0A/ms   | 10  |     |     | V/μS |
| R <sub>th(j-c)</sub> | Thermal Resistance                         | Junction to Case   |     |     | 3.7 | °C/W |
| I <sub>H</sub>       | Maintain current                           | Junction to Case   |     |     | 15  | mA   |

\* Note 1: The drain current is limited by maximum junction temperature limit.

\* Note 2: Pulse Test, width ≤ 300 μ S, ≤ 2% duty cycle

Characteristics

Figure I, Gate characteristic

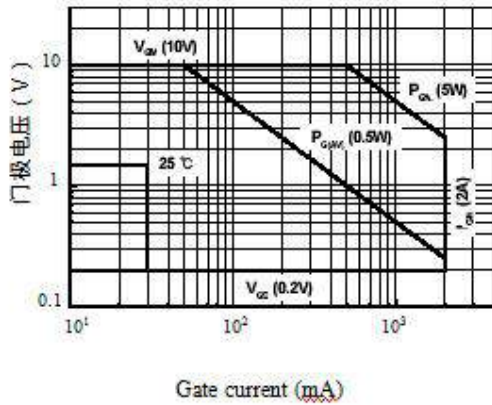


Figure II, on-state voltage

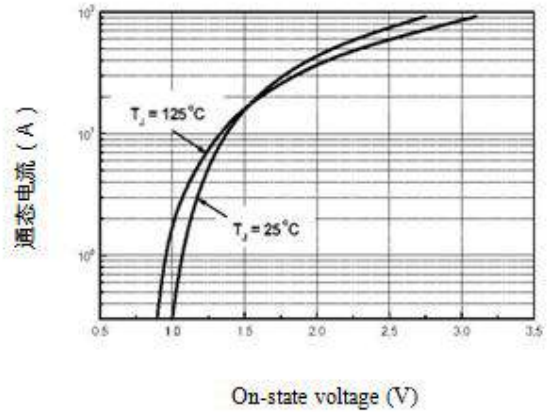


Figure III, the gate trigger voltage junction temperature

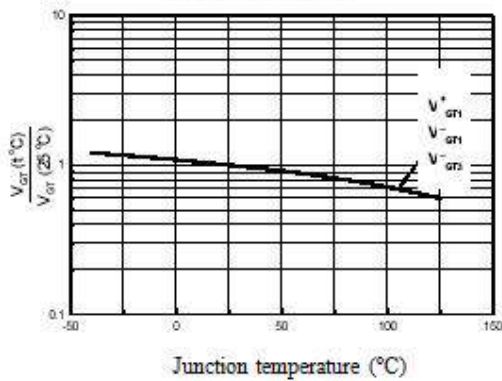


Figure IV-state current maximum power consumption

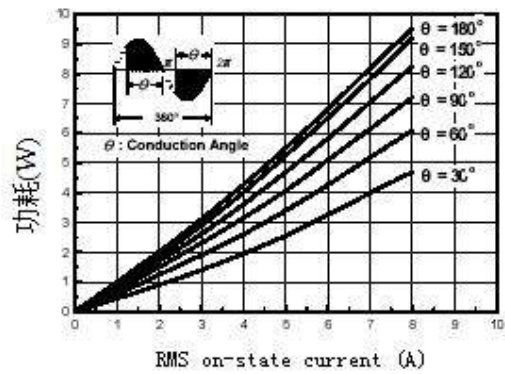


Figure V, on-state current case temperature

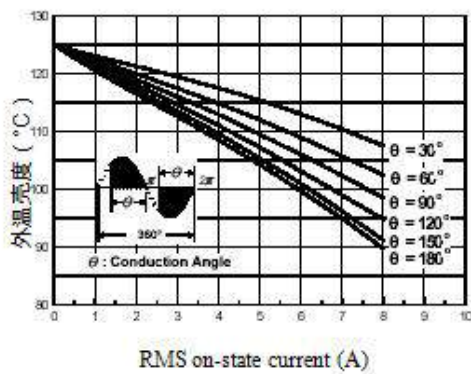
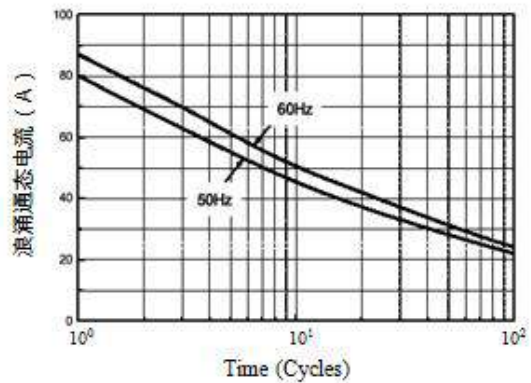


Figure VI, the maximum surge on-state current (non-repetition)



Characteristics

Figure VII, the gate trigger current

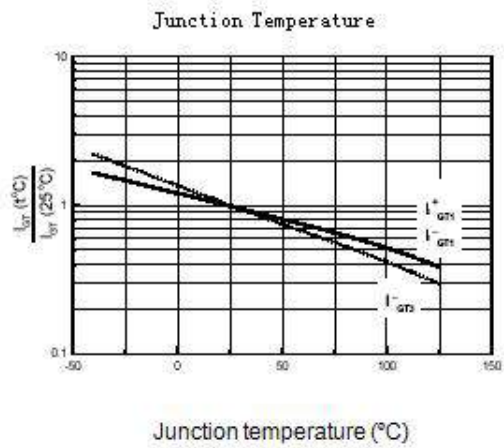


Figure Eight, transient thermal resistance

