

## Press Fit Triac ½", 15 Amps

**Features**

- Improved glass passivation for high reliability
- Exceptional stability at high temperatures
- Metric thread type available
- Low thermal resistance



TO-203/F

| Electrical Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise specified) |                                                    |              |                    |
|-----------------------------------------------------------------------------------|----------------------------------------------------|--------------|--------------------|
| Parameter                                                                         | Symbol                                             | Part Numbers | Units              |
| Maximum repetitive peak reverse voltage (1), $V_{RRM}$                            | 200                                                | NPT152       | V                  |
|                                                                                   | 400                                                | NPT154       |                    |
|                                                                                   | 600                                                | NPT156       |                    |
| RMS on-state current                                                              | $I_{T(RMS)}$                                       | 15           | A                  |
| Non-repetitive peak surge on-state current, one cycle                             | $I_{TSM}$                                          | 150          | A                  |
| Peak gate trigger current                                                         | $I_{GTM}$                                          | 4            | A                  |
| Peak gate power dissipation @ $I_{GT} \leq I_{GTM}$                               | $P_{GM}$                                           | 40           | W                  |
| Average gate power dissipation                                                    | $P_{G(AV)}$                                        | 0.8          | W                  |
| Peak off-state current (1)                                                        | $I_{DRM}$ & $I_{RRM}$                              | 1.0          | mA                 |
| Maximum instantaneous forward voltage drop (1)                                    | $V_{TM}$                                           | 2.2          | V                  |
| DC holding current (1)                                                            | $I_H$                                              | 60           | mA                 |
| Critical rate-of-rise of off-state voltage (1)                                    | Critical dv/dt                                     | 100          | V/ $\mu\text{sec}$ |
| Critical rate-of-rise of commutation voltage (1)                                  | Commutating dv/dt                                  | 3            | V/ $\mu\text{sec}$ |
| DC gate trigger current                                                           | ( $T_2+$ Gate +, $T_2-$ Gate -)<br>Quads I and III | $I_{GT}$     | 100                |
|                                                                                   | ( $T_2+$ Gate -, $T_2-$ Gate +)<br>Quads II and IV |              | 150                |
| DC gate trigger voltage                                                           | $V_{GT}$                                           | 2.5          | V                  |
| Gate controlled turn-on time                                                      | Tgt                                                | 3            | $\mu\text{sec}$    |

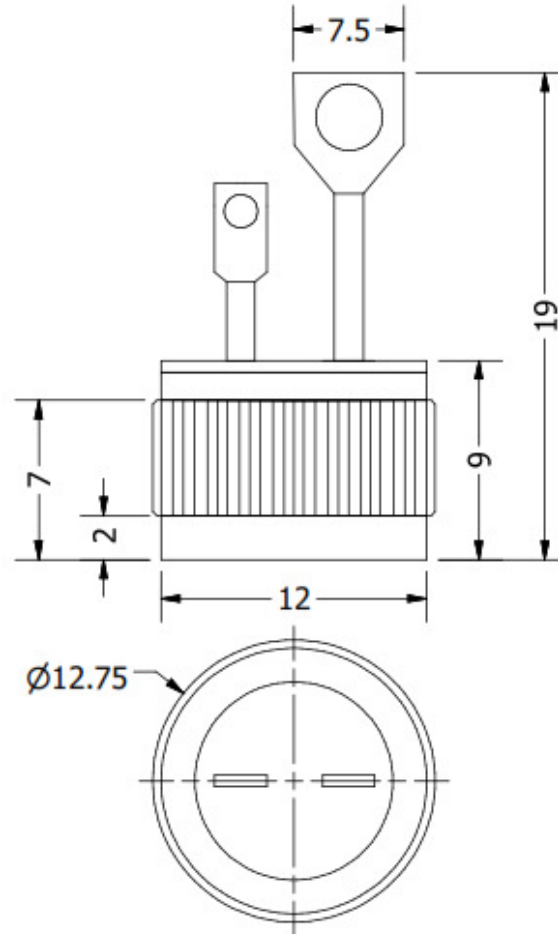
| Thermal and Mechanical Specifications ( $T_A = 25^\circ\text{C}$ , unless otherwise noted) |                   |              |                           |
|--------------------------------------------------------------------------------------------|-------------------|--------------|---------------------------|
| Parameters                                                                                 | Symbol            | Values       | Units                     |
| Maximum operating junction temperature range                                               | $T_J$             | - 40 to +110 | $^\circ\text{C}$          |
| Maximum storage temperature range                                                          | $T_{stg}$         | - 40 to +150 | $^\circ\text{C}$          |
| Maximum thermal resistance, junction to case                                               | $R_{\theta(j-c)}$ | 1.8          | $^\circ\text{C}/\text{W}$ |
| Approximate weight                                                                         | W                 | 15           | g                         |

Notes:

(1) All values apply in either direction

**Package Outline**

*(All dimensions in mm)*



**Ordering Table**

| <i>NPT</i> | <i>15</i> | <i>2,4,6</i> |
|------------|-----------|--------------|
| <b>1</b>   | <b>2</b>  | <b>3</b>     |

- 1 – Press Fit Triac
- 2 – Current,  $I_{T(RMS)}$
- 3 – Voltage,  $V_{RRM}$  (See table)