

Press Fit Stud Mount Triac ½", 40 Amps

Features

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



TO-48/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 | NPTS402 | V | |
| | 400 | NPTS404 | | |
| | 600 | NPTS406 | | |
| RMS on-state current | $I_{T(RMS)}$ | 40 | A | |
| Non-repetitive peak surge on-state current, one cycle | I_{TSM} | 400 | A | |
| Peak gate trigger current | I_{GTM} | 12 | A | |
| Peak gate power dissipation @ $I_{GT} \leq I_{GTM}$ | P_{GM} | 40 | W | |
| Average gate power dissipation | $P_{G(AV)}$ | 0.75 | W | |
| Peak off-state current (1) | I_{DRM} & I_{RRM} | 1.0 | mA | |
| Maximum instantaneous forward voltage drop (1) | V_{TM} | 2.0 | V | |
| DC holding current (1) | I_H | 60 | mA | |
| Critical rate-of-rise of off-state voltage (1) | Critical dv/dt | 200 | V/ μsec | |
| Critical rate-of-rise of commutation voltage (1) | Commutating dv/dt | 3 | V/ μsec | |
| DC gate trigger current | (T_2+ Gate +, T_2- Gate -) Quads I and III | I_{GT} | 100 | mA |
| | (T_2+ Gate -, T_2- Gate +) Quads II and IV | | 150 | |
| DC gate trigger voltage | V_{GT} | 2.5 | V | |
| Gate controlled turn-on time | Tgt | 3 | μsec | |

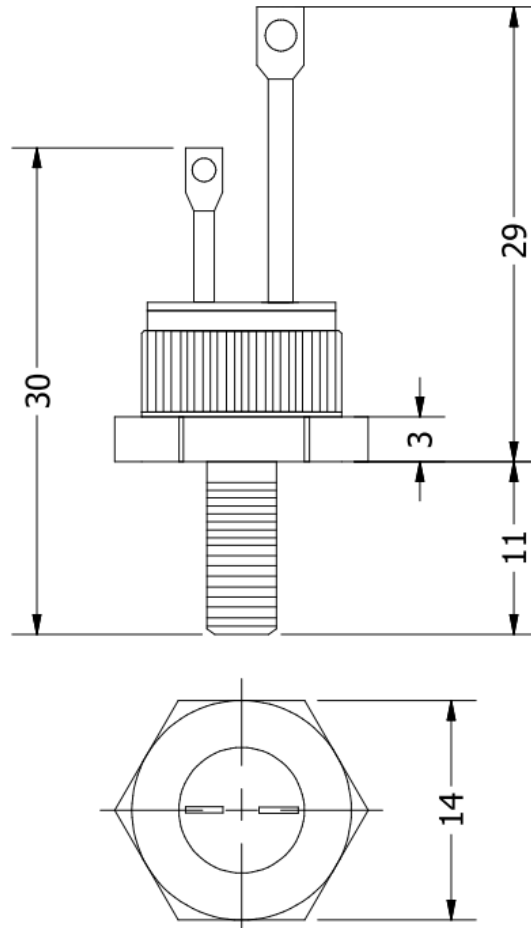
| Thermal and Mechanical Specifications ($T_A = 25^\circ\text{C}$, unless otherwise noted) | | | |
|--|-------------------|--------------|---------------------------|
| Parameters | Symbol | Values | Units |
| Maximum operating junction temperature range | T_J | - 40 to +110 | $^\circ\text{C}$ |
| Maximum 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 | 20 | g |

Notes:

(1) All values apply in either direction

Package Outline

(All dimensions in mm)



Ordering Table

| <i>NPTS</i> | <i>40</i> | <i>2,4,6</i> |
|-------------|-----------|--------------|
| 1 | 2 | 3 |

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