

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

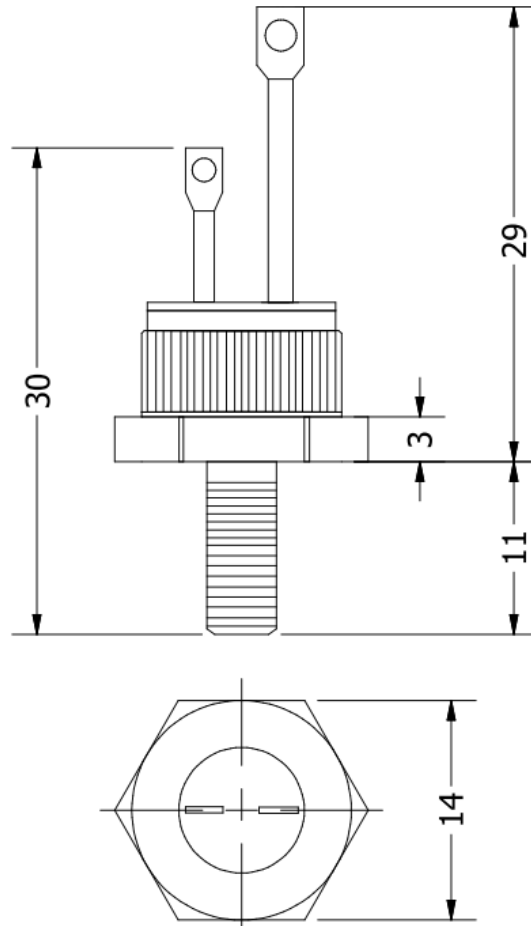
Thermal and Mechanical Specifications ($T_A = 25^\circ\text{C}$, unless otherwise noted)			
Parameters	Symbol	Values	Units
Maximum operating junction temperature range	T_J	- 40 to +110	$^\circ\text{C}$
Maximum storage temperature range	T_{stg}	- 40 to +150	$^\circ\text{C}$
Maximum thermal resistance,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