

## Phase Control Thyristors (Stud Type), 150A

### Features

- Improved glass passivation for high reliability
- Exceptional stability at high temperatures
- High di/dt and dv/dt capabilities
- Metric thread type available
- Low thermal resistance

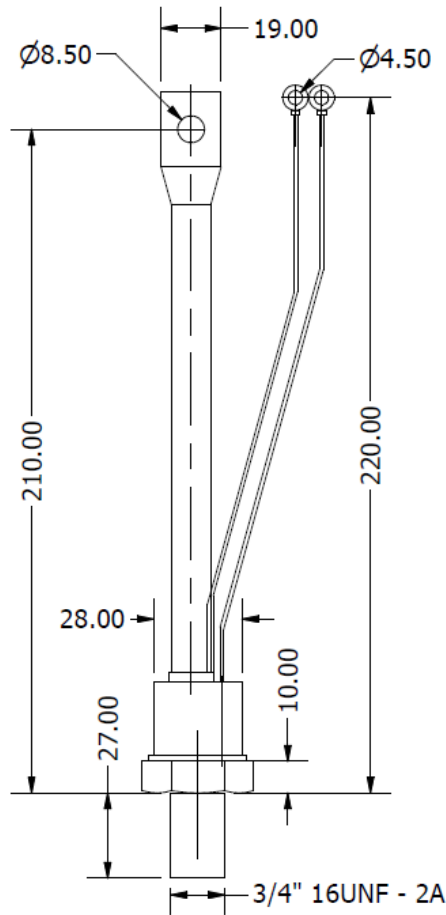
Electrical Ratings ( $T_A = 25^\circ\text{C}$ , unless otherwise noted)				
Parameters	Symbol	Values	Units	
Maximum on-state average current 180° sinusoidal conduction @ $T_J = 85^\circ\text{C}$	$I_{T(AV)}$	150	A	
Maximum RMS on-state current	$I_{T(RMS)}$	235	A	
Maximum peak, one cycle non-repetitive surge current	$I_{TSM}$	5700	A	
Maximum $I^2t$ for fusing	$I^2t$	163000	$\text{A}^2\text{s}$	
Maximum repetitive peak on and off-state voltage range	$V_{RRM}$ , $V_{DRM}$	400 to 1600	V	
Maximum peak on-state voltage ( $T_J = 25^\circ\text{C}$ , $I_{peak} = 79\text{A}$ )	$V_{TM}$	1.8	V	
Maximum holding current @ $T_J$	$I_H$	200	mA	
Maximum latching current @ $T_J$	$I_L$	400	mA	
Maximum rate of rise of turn-on current, $V_{DRM} \leq 600\text{V}$	di/dt	200	$\text{A}/\mu\text{s}$	
Critical rate of rise of off-state voltage	$T_J = T_J$ maximum, 100% $V_{DRM}$	200	dv/dt	$\text{V}/\mu\text{s}$
	$T_J = T_J$ maximum, 67% $V_{DRM}$	400		
Maximum gate current required to trigger	anode supply 6 V resistive load @ $T_J$	$I_{GT}$	150	mA
Maximum gate voltage required to trigger		$V_{GT}$	2.0	V



TO-209AB (TO-93)

Thermal and Mechanical Specifications ( $T_A = 25^\circ\text{C}$ , unless otherwise noted)			
Parameters	Symbol	Values	Units
Maximum operating junction temperature range	$T_J$	- 60 to +125	$^\circ\text{C}$
Maximum storage temperature range	$T_{Stg}$	- 60 to +125	$^\circ\text{C}$
Maximum thermal resistance, junction to case	$R_{th(JC)}$	0.11	$^\circ\text{C}/\text{W}$
Mounting torque	F	0.2(min) to 0.3(max)	mkg
Approximate weight	W	14	g

**Package Outline**



ALL DIMENSIONS IN MM

**Ordering Table**

150	NT	120
1	2	3

- 1 – Current Rating =  $I_F (AV)$
- 2 – Phase Controlled Thyristor (SCR)
- 3 – Voltage x 10 =  $V_{RRM}$