

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

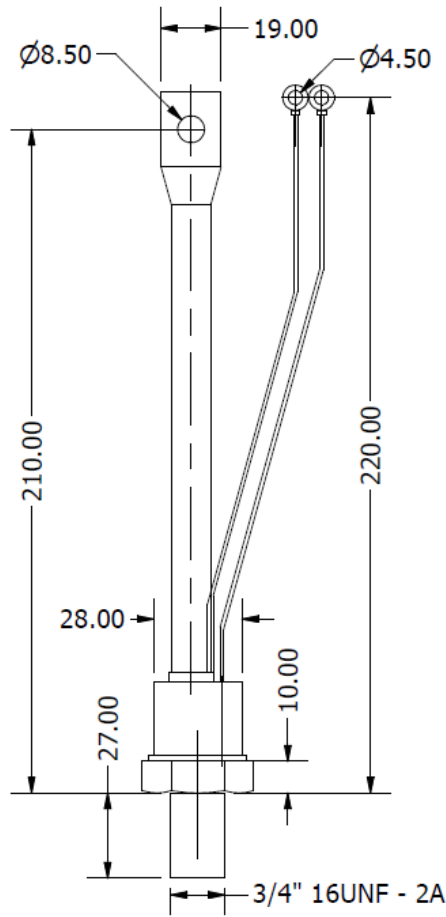
Electrical Ratings ($T_A = 25^\circ\text{C}$, unless otherwise noted)				
Parameters	Symbol	Values	Units	
Maximum on-state average current 180° sinusoidal conduction @ $T_J = 85^\circ\text{C}$	$I_{T(AV)}$	150	A	
Maximum RMS on-state current	$I_{T(RMS)}$	235	A	
Maximum peak, one cycle non-repetitive surge current	I_{TSM}	5700	A	
Maximum I^2t for fusing	I^2t	163000	A^2s	
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}