

## Phase Control Thyristors (Stud Type), 100A

## 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

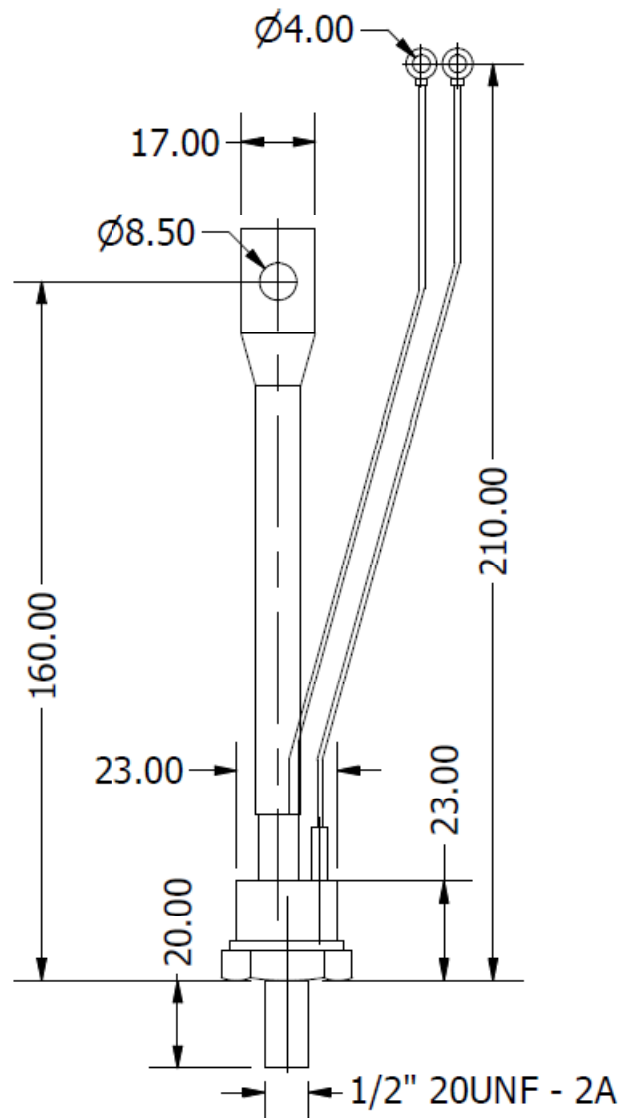
Electrical Ratings ( $T_A = 25^{\circ}\text{C}$ , unless otherwise noted)				
Parameters		Symbol	Values	Units
Maximum on-state average current 180° sinusoidal conduction @ $T_J = 85^{\circ}\text{C}$		$I_{T(AV)}$	100	A
Maximum RMS on-state current		$I_{T(RMS)}$	157	A
Maximum peak, one cycle non-repetitive surge current		$I_{TSM}$	2020	A
Maximum $I^2t$ for fusing		$I^2t$	2400	$\text{A}^2\text{s}$
Maximum repetitive peak on and off-state voltage range		$V_{RRM}$ , $V_{DRM}$	400 to 1600	V
Maximum peak on-state voltage ( $T_J = 25^{\circ}\text{C}$ , $I_{peak} = 79\text{A}$ )		$V_{TM}$	1.39	V
Maximum holding current @ $T_J$		$I_H$	150	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% $V_{DRM}$	dv/dt	100	$\text{V}/\mu\text{s}$
	$T_J = T_J$ maximum, 67% $V_{DRM}$		300	
Maximum gate current required to trigger	anode supply 6 V resistive load @ $T_J$	$I_{GT}$	150	mA
Maximum gate voltage required to trigger		$V_{GT}$	1.9	V



TO-209AC (TO-94)

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	$R_{th(jc)}$	0.36	$^{\circ}\text{C}/\text{W}$
Mounting torque	F	0.2(min) to 0.3(max)	mkg
Approximate weight	W	14	g

## Package Outline



ALL DIMENSIONS IN MM