

## FEATURES

- All difussed design
- High current capabilities
- High surge current capabilities
- High rated voltage
- Low thermal impedance
- Compact size and small weight
- 3/4"UNF thread stud

## APPLICATION

- High voltage Power supplies
- Motor control
- Battery chargers
- Free wheeling diode
- Resistance welding
- Arc welding



Photo non-contractual

## TECHNICAL SPECIFICATION

### Electrical properties

Parameter		Value & test conditions
Repetitive reverse voltage	$V_{RRM}$	1200 V
Average forward current	$I_{AV}$	400 A @ $T_c=125^\circ\text{C}$
R.M.S. Forward current	$I_{RMS}$	628 A
Surge forward current	$I_{FSM}$	7000 A at 10ms, $T_{jmax}$
$I^2t$ value	$I^2t$	$245 \times 10^3 \text{ A}^2\text{s}$
Reverse current	$I_R$	50mA @ $T_j=25^\circ\text{C}$
		10 mA @ $T_{jmax}$
Threshold voltage	$V_o$	0,62 V.
Slope resistance	$r_o$	0,563 mOhm
On-state voltage max.	$V_{FM}$	1,20 V at $I_{FM}=800 \text{ A}$ @ $T_j=25^\circ\text{C}$

### Thermal properties

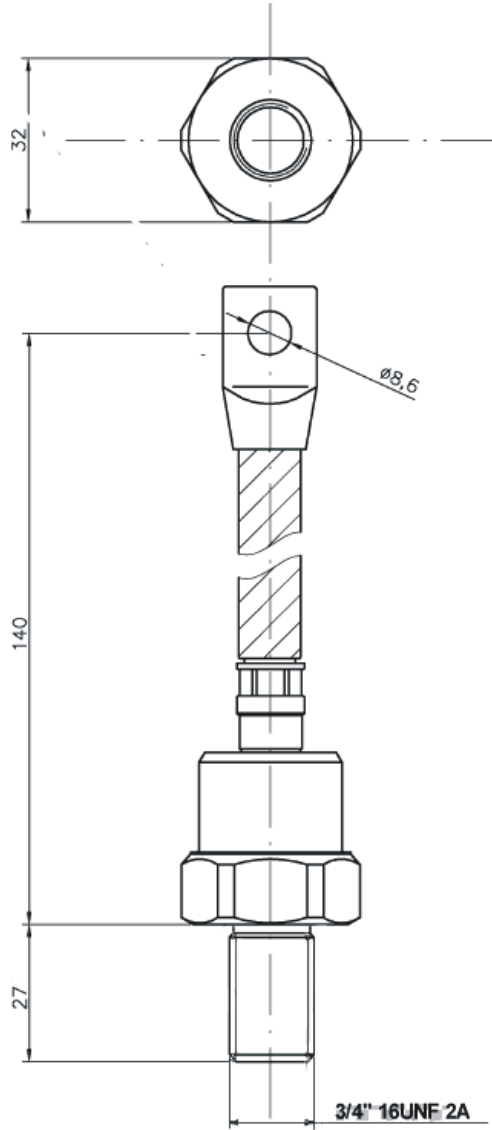
Parameter		Value & test conditions
Max. operating junction temperature	$T_{jmax}$	190 °C
Thermal resistance junction-capsule	$R_{TH_{j-c}}$	DC 0,12 °C/W.
		180° sin 0,139 °C/W.
		120° sin 0,168 °C/W.
		60° sin 0,187 °C/W.
Thermal resistance capsule-heatsink	$R_{TH_{c-hs}}$	0,04 °C/W.
Storage temperature	$T_{stg}$	-40...+190°C

### Mechanical properties

Parameter		Value & test conditions
Weight	M	260 g.
Mounting torque	m	28...32 Nm $\pm 10\%$

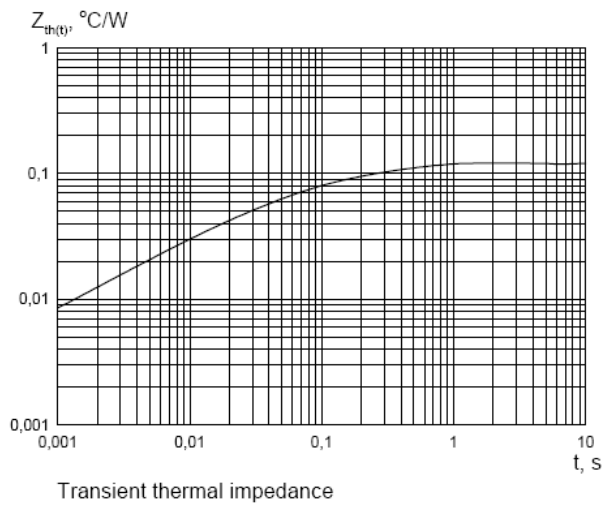
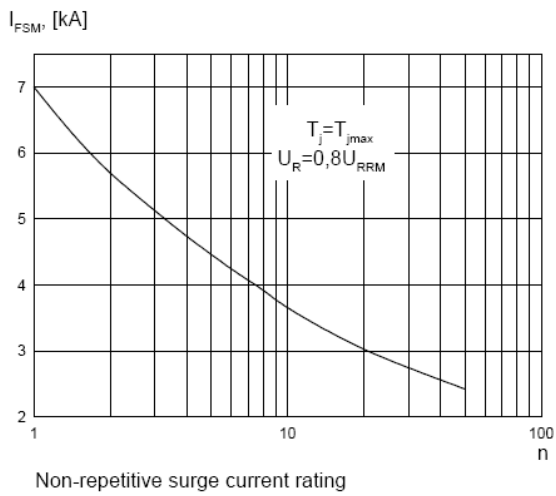
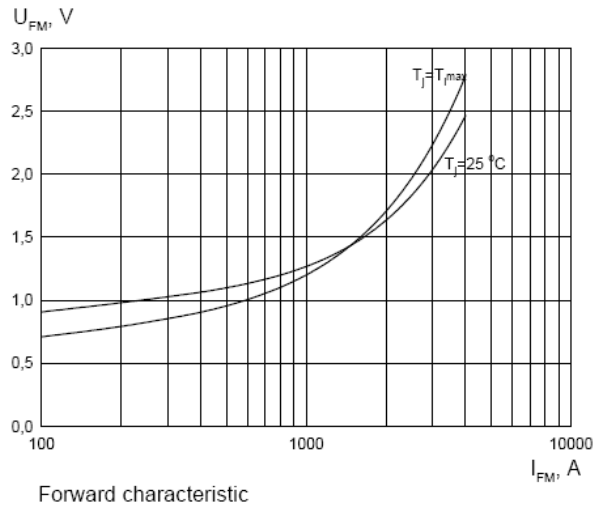
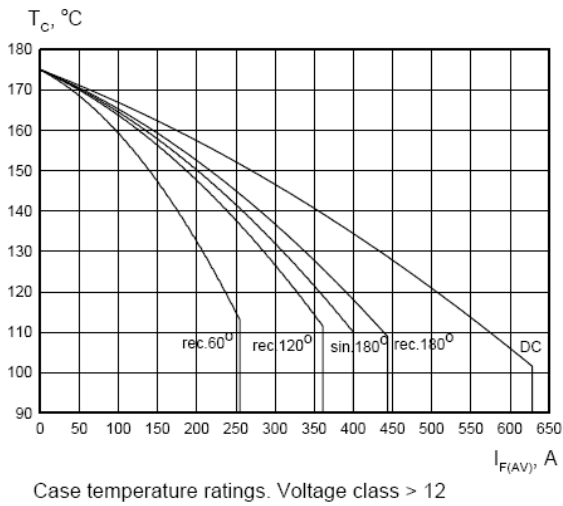
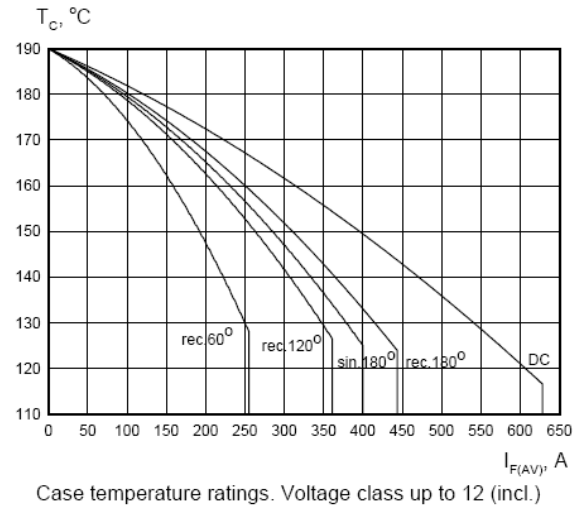
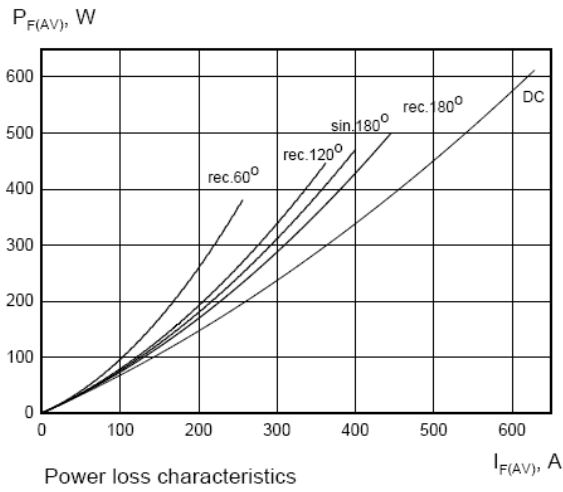
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**DIMENSIONS**



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## Cost Effective Products

### SEMICODE ELECTRONICA

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SEMICODE products include semiconductors, passive components and accessories focused in power electronics market.

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**Tentative information:** This is the most tentative form of information and represents a very preliminary specification. No actual design work on the product has been started.

**Preliminary Information:** The product is in design and development. The datasheet represents the product as it is understood but details may change.

**Advance Information:** The product design is complete and final characterisation for volume production is well in hand.

**No Annotation:** The product parameters are fixed and the product is available to datasheet specification.

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