

PRELIMINARY TECHNICAL INFORMATION

FEATURES

- All difussed design
- High current capabilities
- High surge current capabilities
- High rated voltage
- Low thermal impedance
- Compact size and small weight
- Metric thread stud

APPLICATION

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



non-contractual image

TECHNICAL SPECIFICATION

Electrical properties

Parameter		Value & test conditions
Repetitive reverse voltage	V_{RRM}	1200 V
Average forward current	I_{AV}	320 A @ $T_c=110^\circ\text{C}$
R.M.S. Forward current	I_{RMS}	502 A
Surge forward current	I_{FSM}	6300 A at 10ms, $V_R=0,8V_{RRM}$, T_{Jmax}
I^2t value	I^2t	$198 \times 10^3 \text{ A}^2\text{s}$
Reverse current	I_R	50mA @ $T_J=25^\circ\text{C}$
		50 mA @ T_{Jmax}
Threshold voltage	V_o	0,69 V.
Slope resistance	r_o	0,99 mOhm
On-state voltage max.	V_{FM}	1,460 V at $I_{FM}=800 \text{ A}$ @ $T_J=25^\circ\text{C}$

Thermal properties

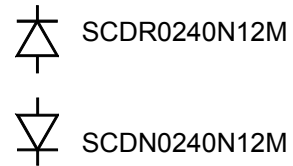
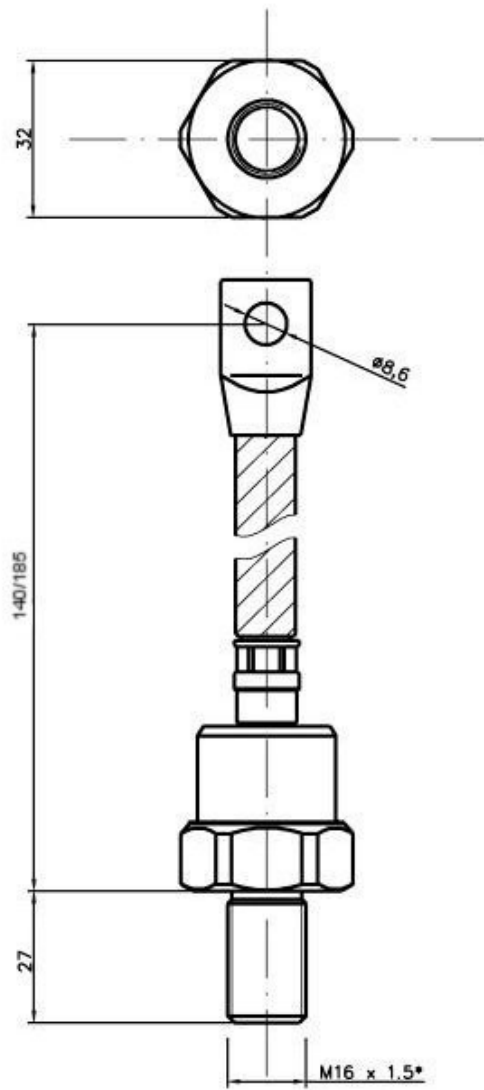
Parameter		Value & test conditions
Max. operating junction temperature	T_{Jmax}	190 °C
Thermal resistance junction-capsule	$R_{TH_{j-c}}$	DC 0,12 °C/W.
		180° sin 0,14 °C/W.
		120° sin 0,168 °C/W.
		60° sin 0,187 °C/W.
Thermal resistance capsule-heatsink	$R_{TH_{c-hs}}$	0,10 °C/W.
Storage temperature	T_{stg}	-40...+175°C

Mechanical properties

Parameter		Value & test conditions
Weight	M	220 g.
Mounting torque	m	28...32 Nm

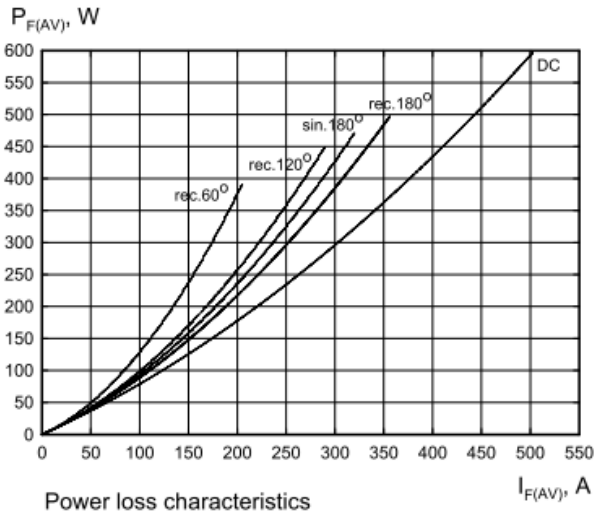
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DIMENSIONS

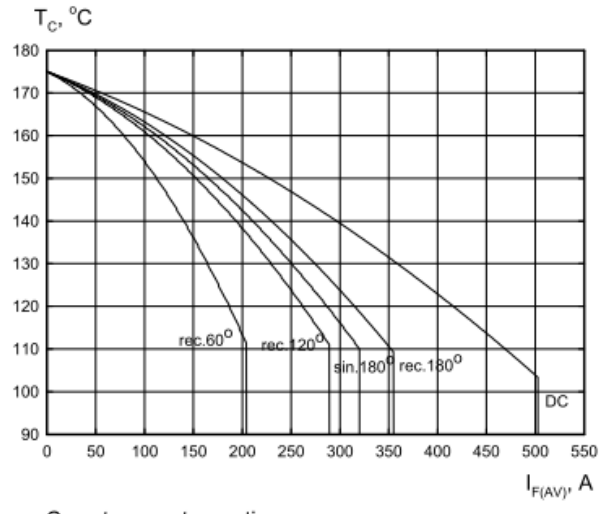


All dimensions in mm

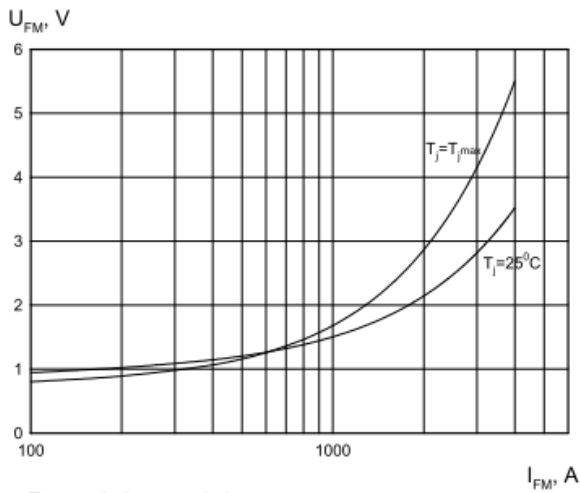
GRAPHICAL INFORMATION



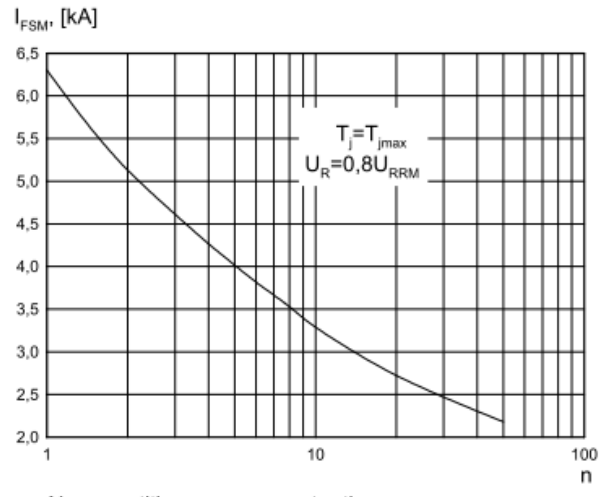
Power loss characteristics



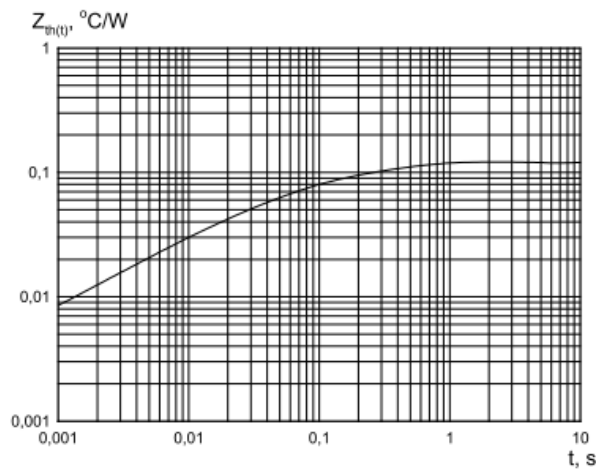
Case temperature ratings



Forward characteristic



Non-repetitive surge current rating



Transient thermal impedance

Cost Effective Products

SEMICODE ELECTRONICA

Offers to the market a comprehensive range of products from recognized manufacturers at the best price/quality ratio, this products are provided with a basic reference code that allows maintaining the same product reference even if the original device manufacturer is replaced. SEMICODE product reference has to be considered as a generic brand.

Seeking the market needs and trends, we are constantly increasing the product portfolio with new products and suppliers, please ask for the updated information available to our local contacts.

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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