

# SCDx0085Nxxx

Stud rectifier diode

### **FEATURES**

- -High current capabilities
- -High surge current capabilities
- -High rated voltage
- -Compact size

### **APPLICATION**

- -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 <sub>AV</sub>	85 A @ Tc=140°C
R.M.S. Forward current	I <sub>RMS</sub>	135 A
Surge forward current	I <sub>FSM</sub>	1600 A at 10ms, Tj <sub>max</sub>
I <sup>2</sup> t value	l <sup>2</sup> t	9500 A <sup>2</sup> s
Reverse current	I <sub>R</sub>	50μA @ Tj=25°C
		10 mA @ Tj <sub>max</sub>
Treshold voltage	Vo	0,93 V.
Slope resistance	ro	0,93 mOhm
On-state voltage max.	$V_{FM}$	1,15 V at I <sub>FM</sub> =270 A @ Tj <sub>max</sub>

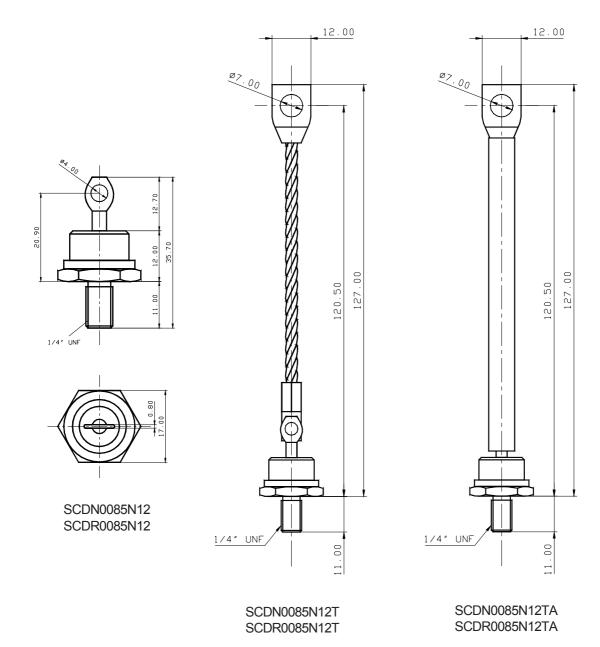
# Thermal properties

Parameter		Value & test conditions
Max. operating junction temperature	Tj <sub>max</sub>	190 °C
Thermal resistance junction-capsule	RTH <sub>j-c</sub>	DC 0,4°C/W.
		180° sin 0,46°C/W.
		120° sin 0,55°C/W.
		60° sin 0,62°C/W.
Thermal resistance capsule-heatsink	RTH <sub>c-hs</sub>	0,15°C/W.
Storage temperature	$T_{stg}$	-40+190°C

# **Mechanical properties**

Parameter		Value & test conditions
Weight	М	26 g. 32 g (T & TA version)
Mounting torque	m	4,5 Nm ±10%





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# Cost Effective Products

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