

# SCD 904...

## PLASTIC CASE

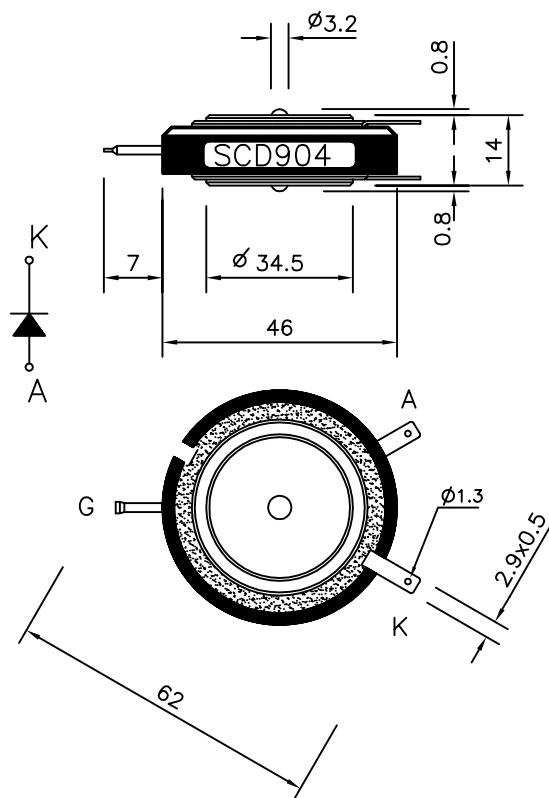
HIGH POWER THYRISTOR  
**1230A<sub>(AV)</sub>**  
Hockey Puk version

### Features

- ⊕ High surge current
- ⊕ A . K – AVAILABLE
- ⊕ Diffused junction

### Typical Applications

- ⊕ Welding
- ⊕ Power supplies
- ⊕ Machine tool controls
- ⊕ High power diode



SCD904 .-- .-

Voltage Code	$V_{DRM}/V_{DRM}$ , max. repetitive peak and off-state voltage	Internal SCOMES Reference
02	200 V	
04	400 V	
06	600 V	
08	800 V	
16	1600 V	

## ELECTRICAL SPECIFICATIONS

### ⊗ BLOCKING

Symbol	Characteristic	Conditions	T <sub>J</sub>	Value	Units
V <sub>RRM</sub>	Repetitive peak reverse voltage		175	200÷2000	V
I <sub>RRM</sub>	Repetitive peak reverse current	V=VRRM	175	50	mA

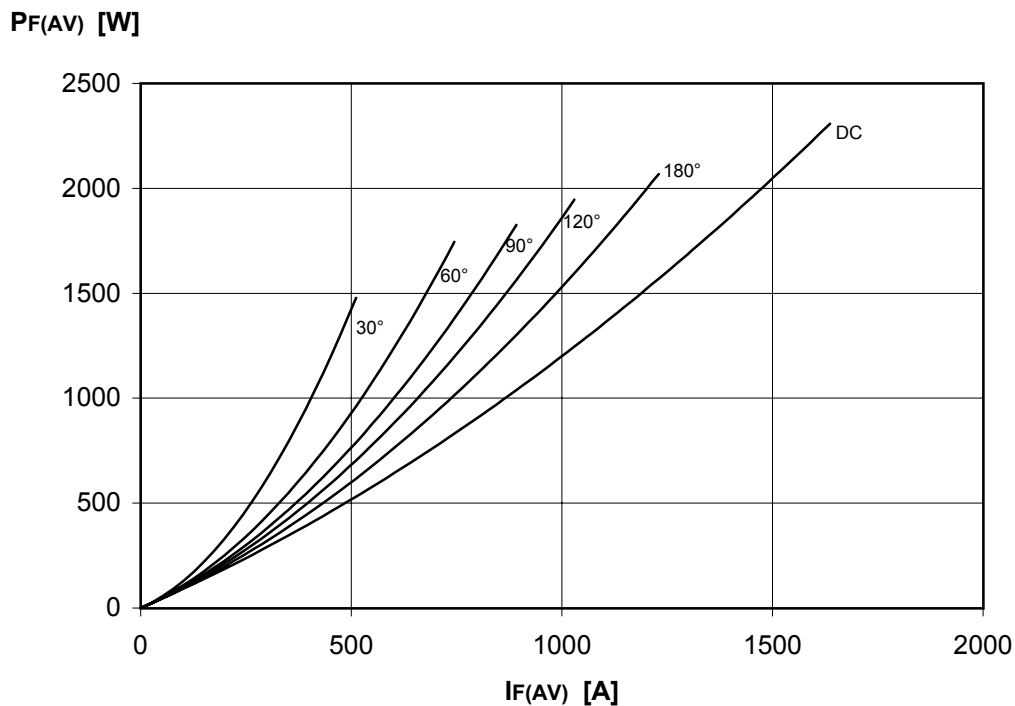
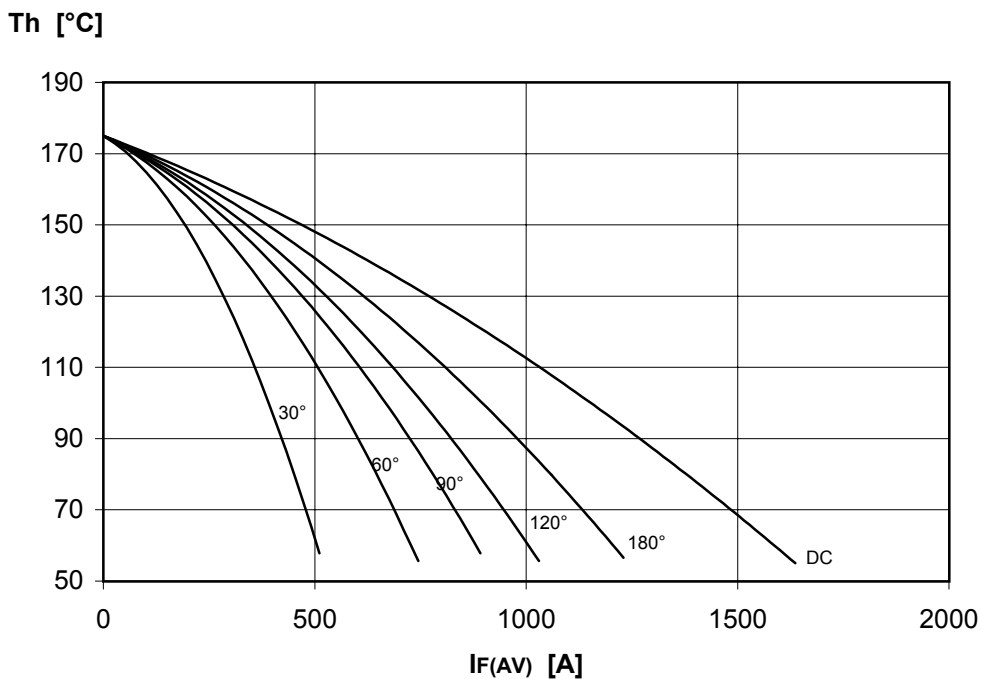
### ⊗ CONDUCTING

Symbol	Characteristic	Conditions	T <sub>J</sub>	Value	Units
I <sub>F(AV)</sub>	Mean forward current	180° sin. 50Hz, Th=55°C double side cooled		1230	A
I <sub>F(AV)</sub>	Mean forward current	180° sin. 50Hz, Th=85°C double side cooled		1170	A
I <sub>FSM</sub>	Surge forward current	Sine wave, 10ms without reverse voltage	175	10.1	kA
I <sup>2</sup> t	I <sup>2</sup> t	Sine wave, 10ms without reverse voltage	175	510x1E3	Ås
V <sub>FM</sub>	Forward voltage	Forward current=1000A	25	1.1	V
V <sub>F(T0)</sub>	Threshold voltage		175	0.87	V
rF	Forward slope resistance		175	0.330	mohm

### ⊗ MOUNTING

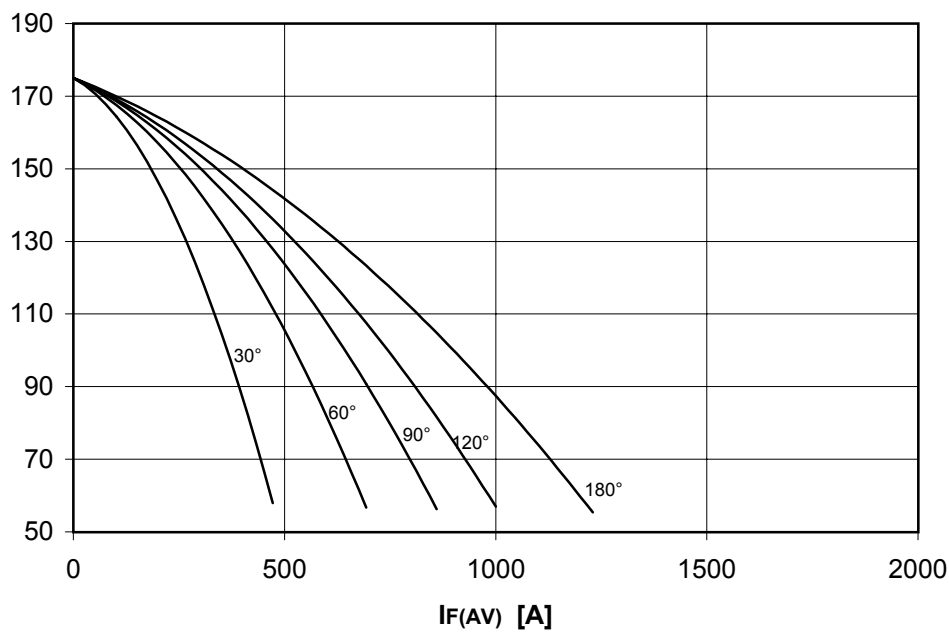
Symbol	Characteristic	Conditions	T <sub>J</sub>	Value	Units
R <sub>th(j-h)</sub>	Thermal impedance,DC	Junction to heatsink, double side cooled		52	°C/kW
R <sub>th(c-h)</sub>	Thermal impedance	Case to heatsink, double side cooled		10	°C/kW
T <sub>J</sub>	Operating junction temperature			-30/+175	°C
F	Mounting force			8.4/9.4	kN
	Mass			95	g

### Dissipation Characteristics Square Wave

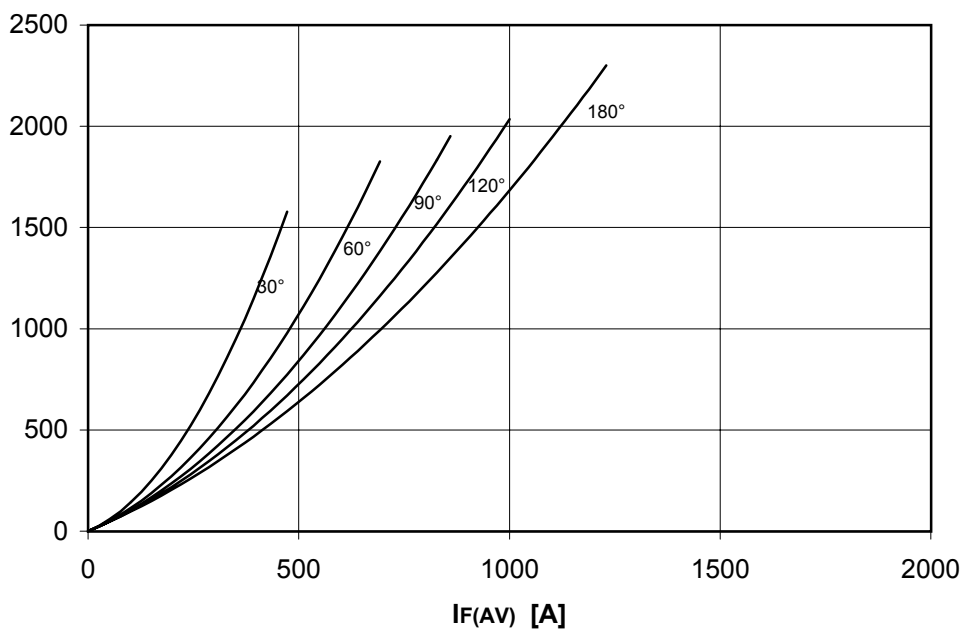


### Dissipation Characteristics Sine Wave

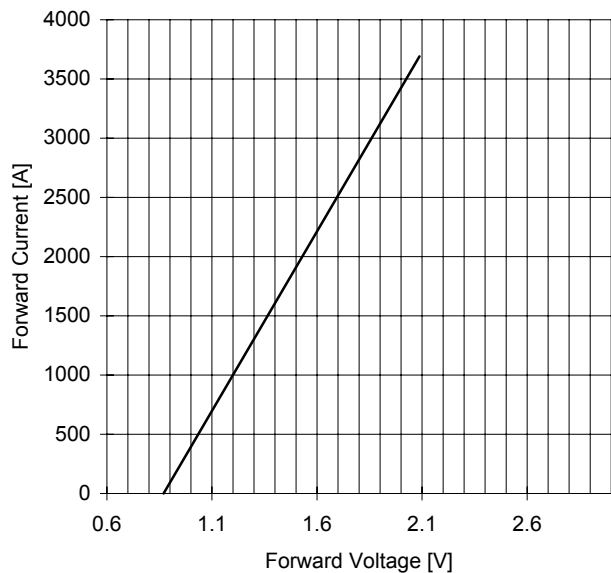
Th [°C]



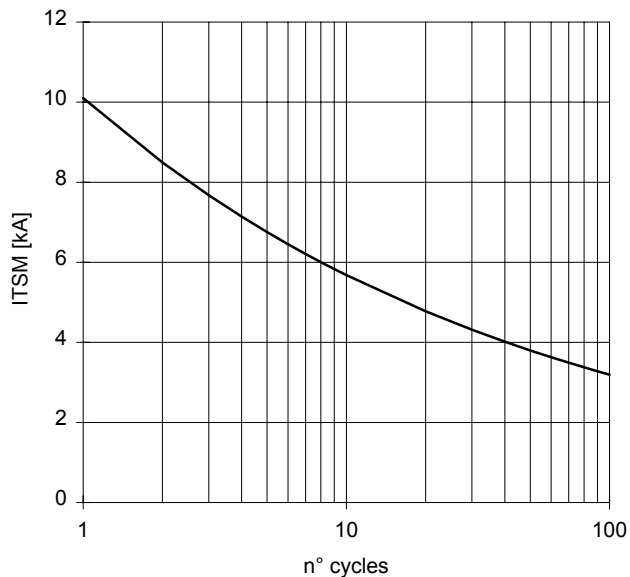
PF(AV) [W]



FORWARD CHARACTERISTIC  
 $T_j = 175\text{ }^\circ\text{C}$



SURGE CHARACTERISTIC  
 $T_j = 175\text{ }^\circ\text{C}$



TRANSIENT THERMAL IMPEDANCE  
DOUBLE SIDE COOLED

