

SEMIPONT® 7

# Power Bridge Rectifier

### **SKD 230**

**Preliminary Data** 

#### **Features**

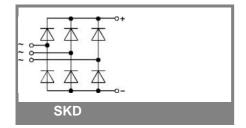
- Robust plastic case with screw terminals
- Heat transfer through aluminium oxide ceramic isolated metal base plate
- Blocking voltage up to 1800V
- · High surge current
- · lead free solder
- UL -recognition applied for file no. E 63 532

## **Typical Applications**

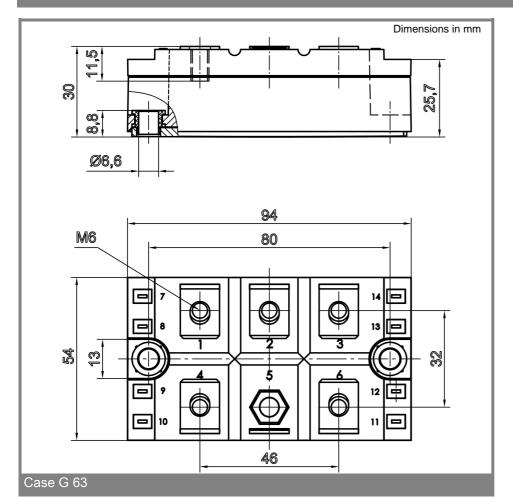
- Three phase rectifier for power supplies
- Input rectifiers for variable frequency drives
- Rectifiers for DC motor field supplies
- Battery charger rectifiers

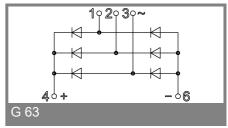
V <sub>RSM</sub>	$V_{RRM}, V_{DRM}$	I <sub>D</sub> = 230 A (full conduction)
V	V	(T <sub>c</sub> = 110 °C)
900	800	SKD 230/08
1300	1200	SKD 230/12
1700	1600	SKD 230/16
1900	1800	SKD 230/18

Symbol	Conditions	Values	Units
I <sub>D</sub>	T <sub>c</sub> = 110 °C	230	Α
I <sub>D</sub>	T <sub>c</sub> = 100 °C	260	Α
$I_D$	T <sub>c</sub> = 85 °C	310	Α
I <sub>FSM</sub>	T <sub>vi</sub> = 25 °C; 10 ms	2200	Α
	T <sub>vi</sub> = 150 °C; 10 ms	1900	Α
i²t	T <sub>vj</sub> = 25 °C; 8,3 10 ms	24200	A²s
	T <sub>vj</sub> = 150 °C; 8,3 10 ms	18050	A²s
V <sub>F</sub>	T <sub>vi</sub> = 25 °C; I <sub>F</sub> = 300 A	max. 1,75	V
$V_{(TO)}$	T <sub>vi</sub> = 150 °C	0,8	V
r <sub>T</sub>	T <sub>vj</sub> = 150 °C	3,8	mΩ
I <sub>RD</sub>	$T_{vj} = 25 \text{ °C}; V_{DD} = V_{DRM}; V_{RD} = V_{RRM}$	max. 0,5	mA
I <sub>RD</sub>	$T_{vj} = 150  ^{\circ}\text{C},  V_{DD} = V_{DRM},  V_{RD} = V_{RRM}$	max. 6	mA
R <sub>th(j-c)</sub>	per diode	0,32	K/W
trig-c)	total	0,0533	K/W
R <sub>th(c-s)</sub>	total	0,03	K/W
T <sub>vi</sub>		- 40 <b>+</b> 150	°C
T <sub>stq</sub>		- 40 <b>+</b> 125	°C
V <sub>isol</sub>	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3600 ( 3000 )	V
M <sub>s</sub>	to heatsink	5 ± 15 %	Nm
Mt	to terminal	5 ± 15 %	Nm
a		5 * 9,81	m/s²
m	approx.	250	g
Case		G 63	



# **SKD 230**





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