



**SEMIPONT® 7**

## Power Bridge Rectifier

### SKD 230

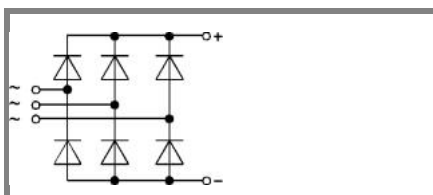
Preliminary Data

### 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

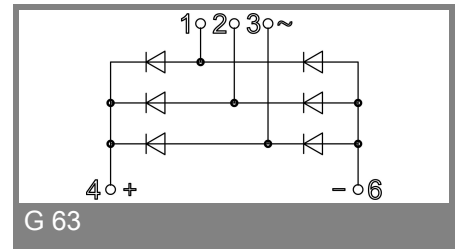
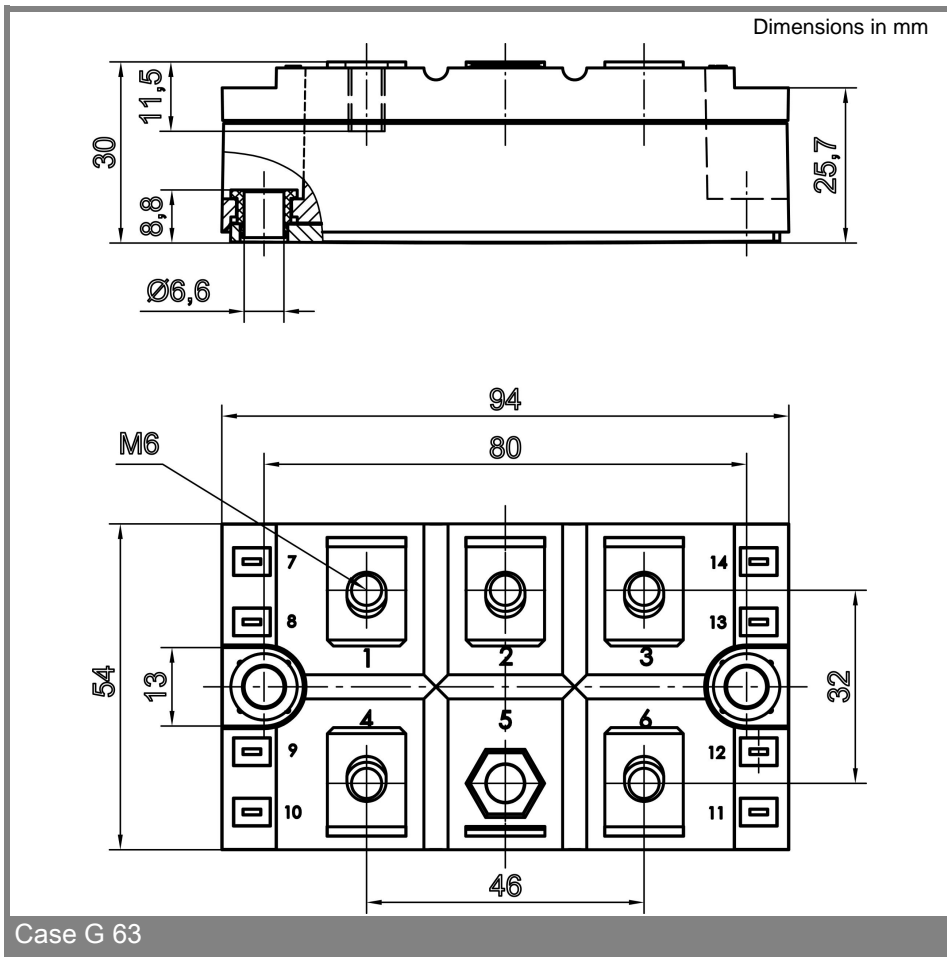
- Three phase rectifier for power supplies
- Input rectifiers for variable frequency drives
- Rectifiers for DC motor field supplies
- Battery charger rectifiers



SKD

$V_{RSM}$ V	$V_{RRM}, V_{DRM}$ V	$I_D = 230$ A (full conduction) ( $T_c = 110$ °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
$I_D$	$T_c = 110$ °C	230	A
$I_D$	$T_c = 100$ °C	260	A
$I_D$	$T_c = 85$ °C	310	A
$I_{FSM}$	$T_{vj} = 25$ °C; 10 ms	2200	A
	$T_{vj} = 150$ °C; 10 ms	1900	A
$i^2t$	$T_{vj} = 25$ °C; 8,3 ... 10 ms	24200	A <sup>2</sup> s
	$T_{vj} = 150$ °C; 8,3 ... 10 ms	18050	A <sup>2</sup> s
$V_F$	$T_{vj} = 25$ °C; $I_F = 300$ A	max. 1,75	V
$V_{(TO)}$	$T_{vj} = 150$ °C	0,8	V
$r_T$	$T_{vj} = 150$ °C	3,8	mΩ
$I_{RD}$	$T_{vj} = 25$ °C; $V_{DD} = V_{DRM}; V_{RD} = V_{RRM}$	max. 0,5	mA
$I_{RD}$	$T_{vj} = 150$ °C; $V_{DD} = V_{DRM}; V_{RD} = V_{RRM}$	max. 6	mA
$R_{th(j-c)}$	per diode	0,32	K/W
	total	0,0533	K/W
$R_{th(c-s)}$	total	0,03	K/W
$T_{vj}$		- 40 ... + 150	°C
$T_{stg}$		- 40 ... + 125	°C
$V_{isol}$	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3600 ( 3000 )	V
$M_s$	to heatsink	5 ± 15 %	Nm
$M_t$	to terminal	5 ± 15 %	Nm
a		5 * 9,81	m/s <sup>2</sup>
m	approx.	250	g
Case		G 63	



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