V_{RSM} V_{RRM} V	I_D (T_{case} = 100 °C) 110 A	160 A
400	**SKD 110/04**	**SKD 160/04**
800	**SKD 110/08**	**SKD 160/08**
1200	**SKD 110/12**	**SKD 160/12**
1400	**SKD 110/14**	**SKD 160/14**
1600	**SKD 110/16**	**SKD 160/16**
1800	**SKD 110/18***	**SKD 160/18***

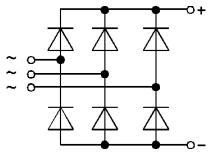
Symbol	Conditions	SKD 110	SKD 160	Units
I_D	T_{case} = 100 °C	110	160	A
	T_{amb} = 45 °C; chassis [1]	28	30	A
	P1/200	70	75	A
	T_{amb} = 35 °C; P1/120F	110	145	A
	P3/120F	123	146	A
I_{FSM}	T_{vj} = 25 °C; 10 ms	1 200	1 800	A
	T_{vj} = 150 °C; 10 ms	1 000	1 500	A
i^2t	T_{vj} = 25 °C; 8,3 ... 10 ms	7 200	16 200	A^2s
	T_{vj} = 150 °C; 8,3 ... 10 ms	5 000	11 200	A^2s
V_F	T_{vj} = 25 °C; I_F = 300 A	1,9	1,65	V
$V_{(TO)}$	T_{vj} = 150 °C	0,85	0,85	V
r_T	T_{vj} = 150 °C	4	3	mΩ
I_{RD}	T_{vj} = 25 °C; V_{RD} = V_{RRM}	0,5	0,5	mA
	T_{vj} = 150 °C; V_{RD} = V_{RRM}	5	6	mA
R_{thjc}	per diode	0,9	0,65	°C/W
	total	0,15	0,11	°C/W
R_{thch}	total	0,03		°C/W
T_{vj}		– 40 ... + 150		°C
T_{stg}		– 40 ... + 125		°C
V_{isol}	a. c. 50...60 Hz; r.m.s; 1 s / 1 min	3600 / 3000		V~
M_1	to heatsink SI units	5 ± 15 %		Nm
	US units	44 ± 15 %		lb. in.
M_2	to terminals SI units	5 ± 15 %		Nm
	US units	44 ± 15 %		lb. in.
w		240		g
Case		G 37		

* Available in limited quantities

[1] Painted metal sheet of min. 250 x 250 x 1 mm; R_{thca} = 1,8 °C/W

SEMIPONT® 4
Power Bridge Rectifiers

SKD 110
SKD 160



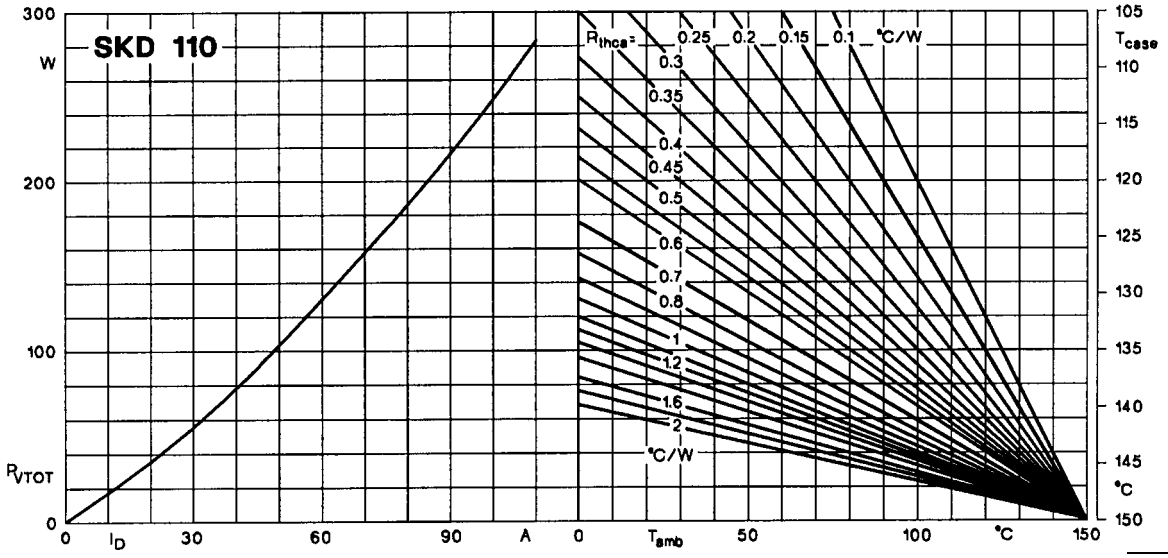
SKD

Features

- Robust plastic case with screw terminals
- Large, isolated base plate
- Blocking voltage up to 1800 V
- High surge currents
- Easy chassis mounting
- UL recognized, file no. E 63 532

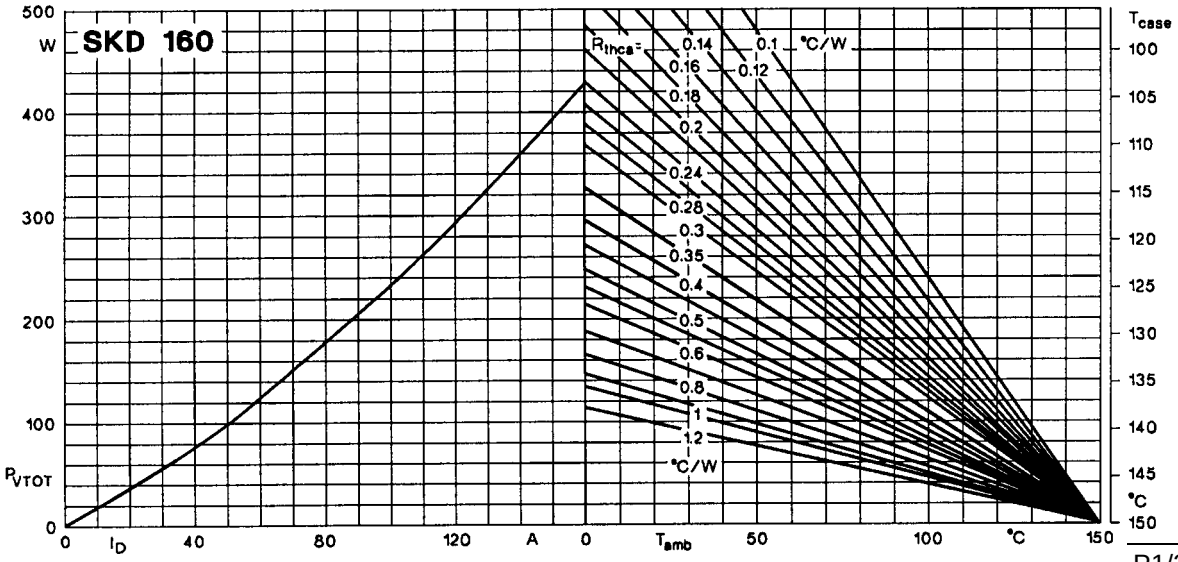
Typical Applications

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



	R_{thca}
P1/200	0,52 °C/W
P1/120 F	0,20 °C/W

Fig. 3 a Power dissipation vs. output current and case temperature



	R_{thca}
P1/200	0,52 °C/W
P1/120 F	0,20 °C/W

Fig. 3 b Power dissipation vs. output current and case temperature

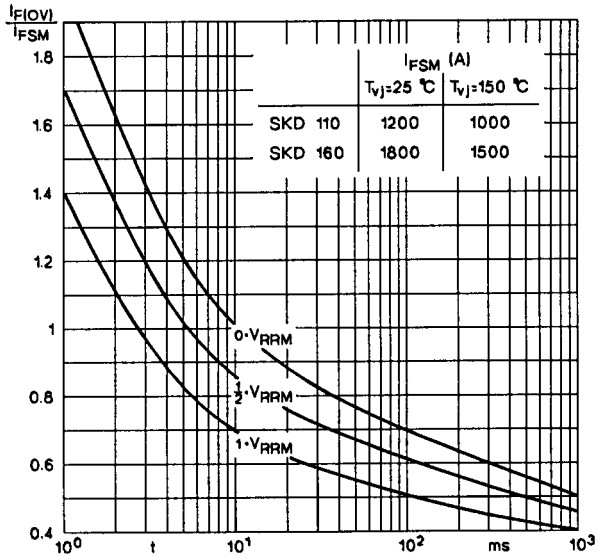


Fig. 5 Surge overload current vs. time

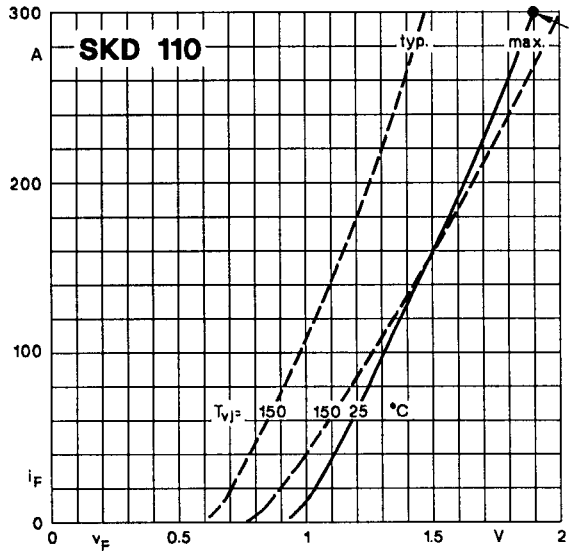


Fig. 9 a Forward characteristics of a single diode

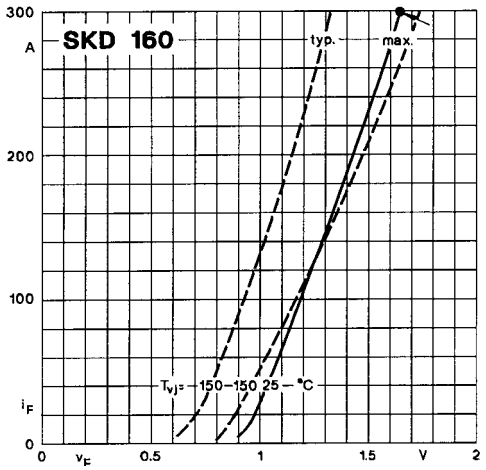


Fig. 9 b Forward characteristics of a single diode

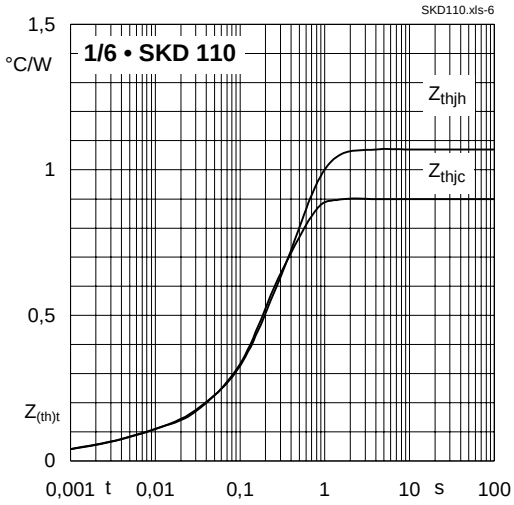


Fig. 12 a Transient thermal impedance vs. time

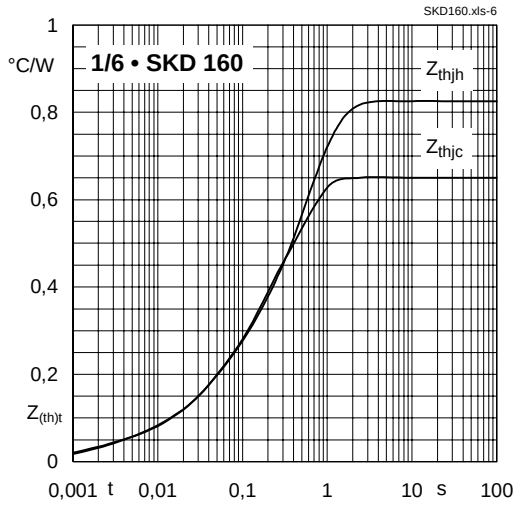
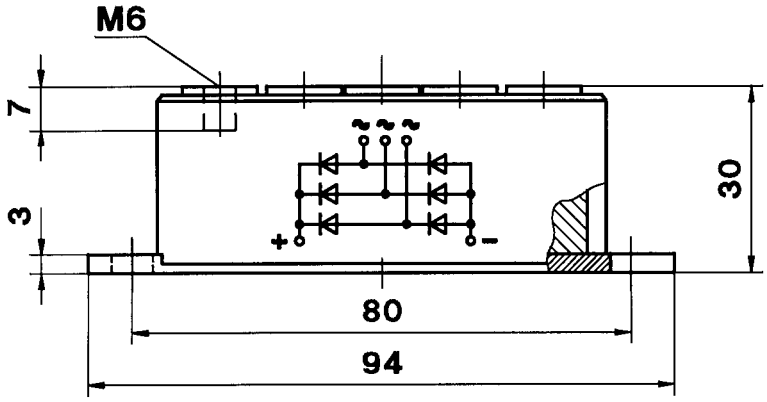


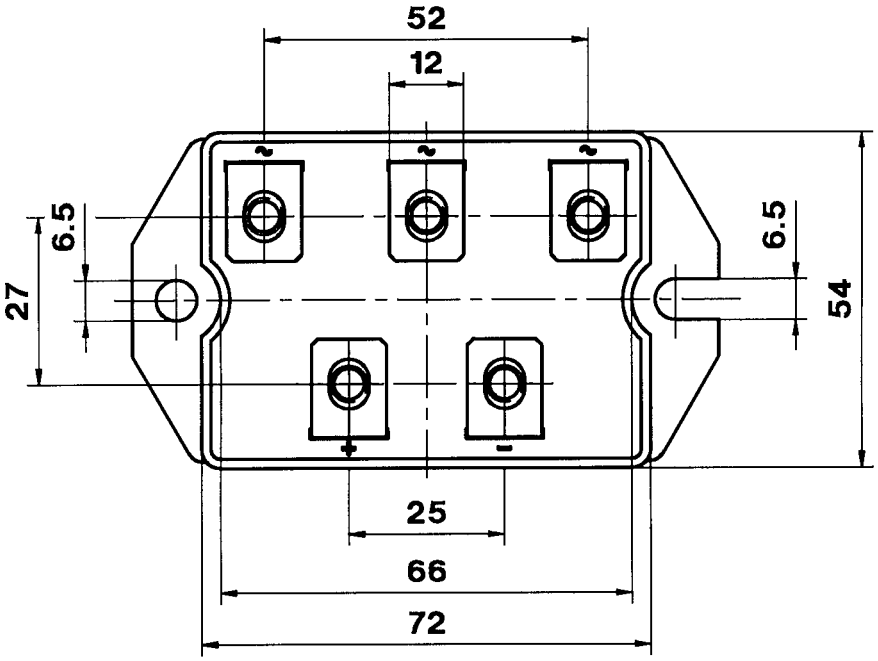
Fig. 12 b Transient thermal impedance vs. time

SKD 110
SKD 160

Case G 37

SEMIPONT® 4





Dimensions in mm