SKN 600, SKR 600

Stud Diode

V_{RSM} V	V_{RRM} V	I_{FRMS} = 950 A (maximum value for continuous operation) I_{FAV} = 600 A (sin. 180; T_c = 105 ºC)	
400	400	SKN 600/04	SKR 600/04
800	800	SKN 600/08	SKR 600/08
1200	1200	SKN 600/12	SKR 600/12
1600	1600	SKN 600/16	SKR 600/16

Rectifier Diode

SKN 600
SKR 600

Features

- Reverse voltages up to 1600 V
- Hermetic metal cases with glass insulator
- Threaded stud M24 x 1,5 mm (3/4 16 UNF 2A and M20 x 1,5 mm available)[2)]
- Optional silicone sleeve (red for SKN and blue for SKR)
- **SKN:** anode to stud
- **SKR:** cathode to stud

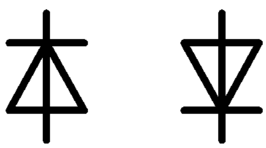
Typical Applications *

- All purpose high power rectifier diodes
- Cooling via heatsinks
- Non-controllable and half-controllable rectifiers
- Free-wheeling diodes
- Recommended snubber network:
  RC: 1,0 µF, 20 Ω (P_R = 2W),
  R_p: 25 KΩ (P_R = 20 W)

1) Mounting with grease-like thermal compound or joint contact compound

2) M24x1,5 is standard; "UNF" should be added in description for ¾ - 16 UNF 2A thread, while "M20" should be added in description for M20x1,5 thread

Symbol	Condition	Values	Units
I_{FAV}	sin. 180 ; T_C = 105 (125) ºC	600 (475)	A
I_{FSM}	T_{vj} = 25º C ; 10 ms	14000	A
	T_{vj} = 180º C ; 10 ms	12000	A
i^2t	T_{vj} = 25º C ; 8,3...10 ms	980000	A^2s
	T_{vj} = 180º C ; 8,3...10 ms	720000	A^2s
V_F	T_{vj} = 25º C, I_F = 1500 A	max. 1,33	V
$V_{(TO)}$	T_{vj} = 180º C	max. 0,8	V
r_T	T_{vj} = 180º C	max. 0,3	mΩ
I_{RD}	T_{vj} = 180º C ; V_R = V_{RRM}	max. 100	mA
Q_{rr}	T_{vj} = 160°C, $-di_F/dt$ = 10 A/µs	typ. 330	µC
$R_{th(j-c)}$		0,1	K/W
$R_{th(c-s)}$		0,015	K/W
T_{vj}		-40...+180	°C
T_{stg}		-55...+180	°C
V_{isol}		-	V~
M_s	M24 x 1,5mm (lubricated)[1)]	60 (48)	Nm
	3/4 – 16 UNF (lubricated)[1)]	30 (24)	Nm
	M20 x 1,5mm (lubricated)[1)]	40 (32)	Nm
a		5 * 9,81	m/s^2
m	approx.	500	g
Case		E16	



SKN SKR

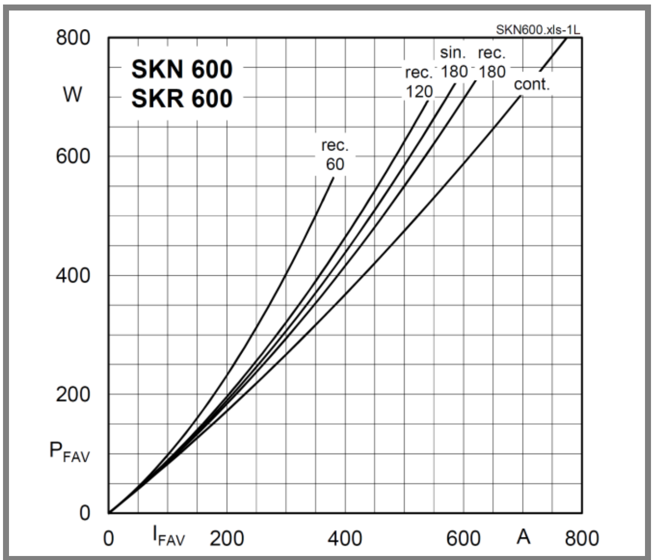


Fig. 1L Power dissipation vs. forward current

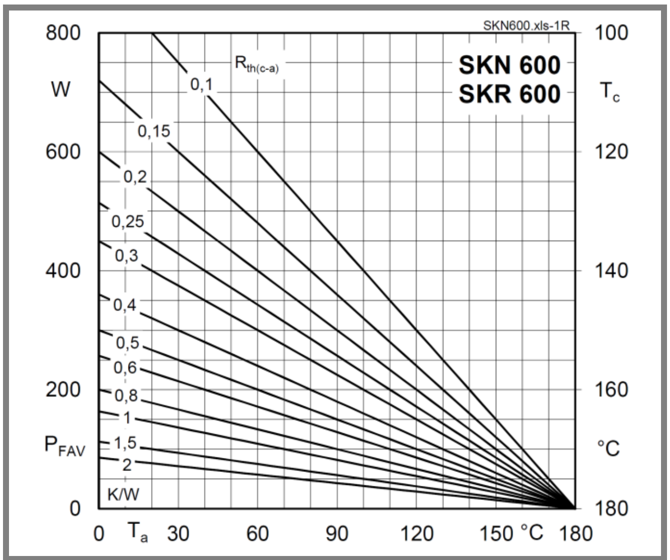


Fig. 1R Power dissipation vs. ambient temperature

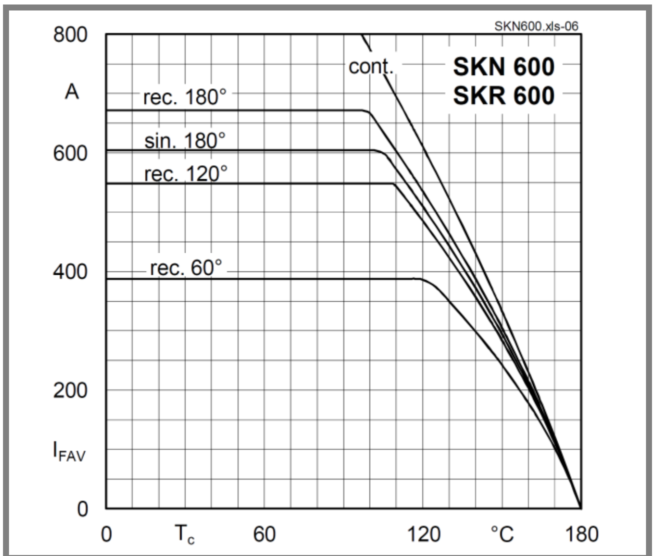


Fig. 2 Forward current vs. case temperature

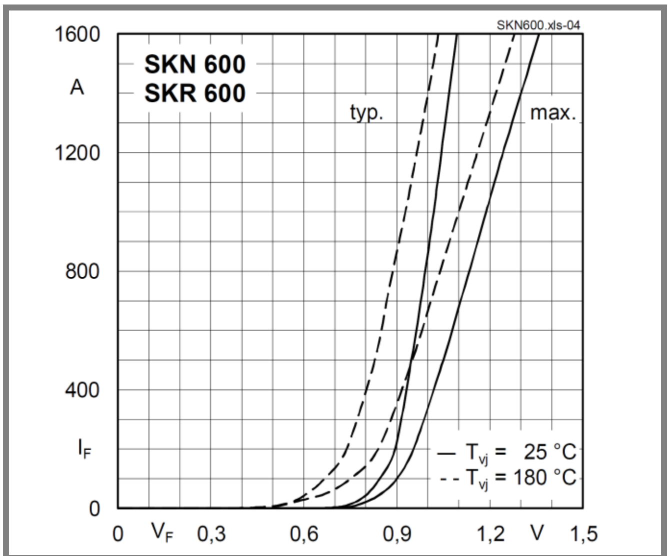


Fig. 5 Forward characteristics

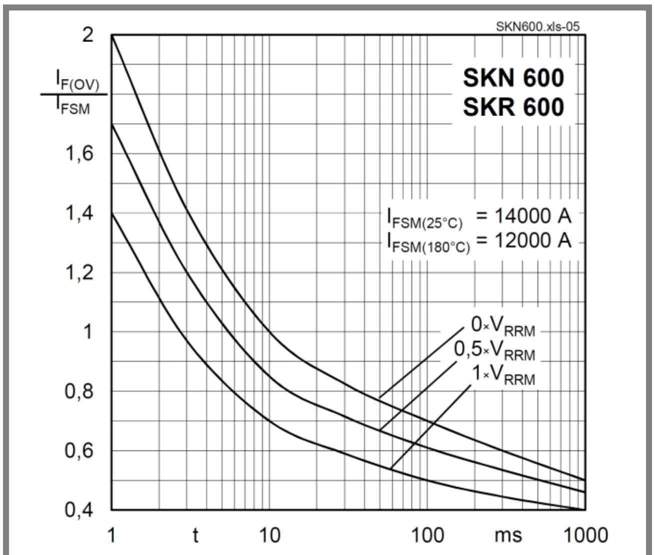
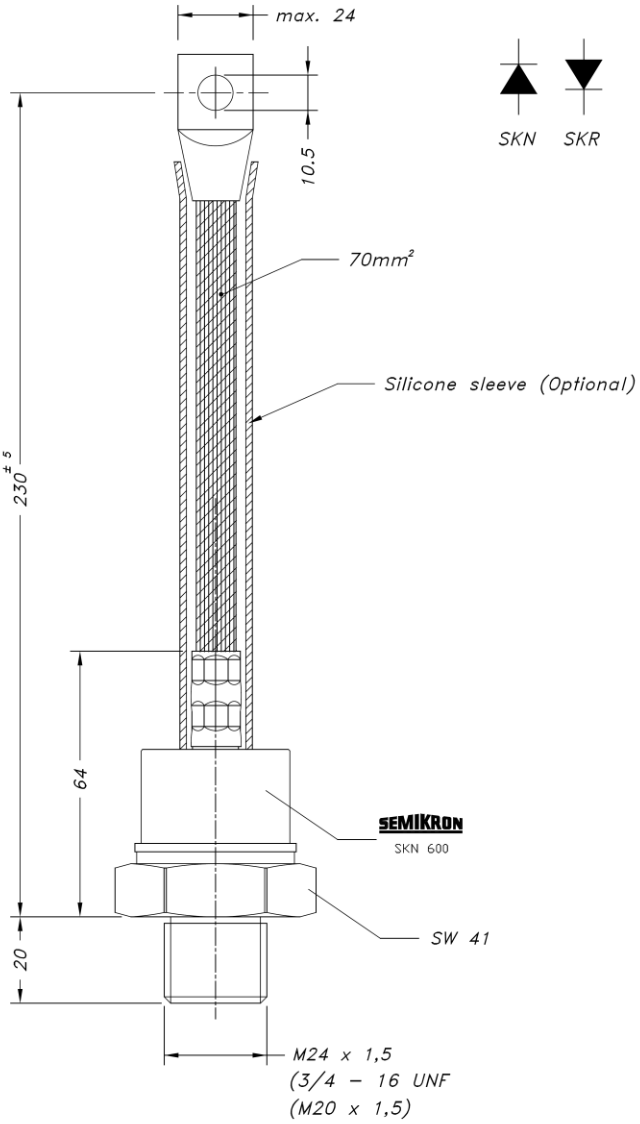


Fig. 6 Surge overload current vs. time

Dimensions in mm



Case E16 (IEC 60191: A 22 B)