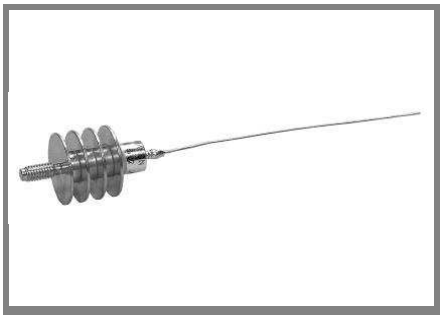
SKN 5

THYRISTOR BRIDGE,SCR BRIDGE



Stud Diode

Rectifier Diode

SKN 5

Features

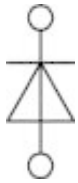
- Reverse voltages up to 1600 V
- Hermetic metal case with glass insulator
- Anode side threaded stud ISO M4
- SKN: anode to stud
- With integrated cooling fins

Typical Applications*

- All-purpose rectifier diodes
- For severe ambient conditions
- Recommended snubber network: RC: 0,02 µF, 500 Ω (P_R = 1 W) R_P = 270 kΩ (P_R = 2 W)

V_{RSM} V	V_{RRM} V	I_{FRMS} = 10 A (maximum value for continuous operation) I_{FAV} = 5 A (sin. 180; T_a = 45 °C)		
200	200	SKN 5/02		
400	400	SKN 5/04		
800	800	SKN 5/08		
1200	1200	SKN 5/12		
1600	1600	SKN 5/16		

Symbol	Conditions	Values	Units
I_{FAV}	sin. 180; T_a = 45 °C	5	A
I_{FSM}	T_{vj} = 25 °C; 10 ms	190	A
	T_{vj} = 180 °C; 10 ms	160	A
i²t	T_{vj} = 25 °C; 8,3 ... 10 ms	180	A²s
	T_{vj} = 180 °C; 8,3 ... 10 ms	130	A²s
V_F	T_{vj} = 25 °C; I_F = 15 A	max. 1,25	V
$V_{(TO)}$	T_{vj} = 180 °C	max. 0,85	V
r_T	T_{vj} = 180 °C	max. 25	mΩ
I_{RD}	T_{vj} = 180 °C; V_{RD} = V_{RRM}	max. 2,2	mA
Q_{rr}	T_{vj} = 160 °C; - di_F/dt = 10 A/µs	18	µC
$R_{th(j-c)}$		1,8	K/W
$R_{th(j-a)}$		25	K/W
T_{vj}		- 40 ... + 180	°C
T_{stg}		- 55 ... + 180	°C
V_{isol}		-	V~
M_s	to heatsink	0,8	Nm
a		5 * 9,81	m/s²
m	approx.	20	g
Case		E 6	



SKN

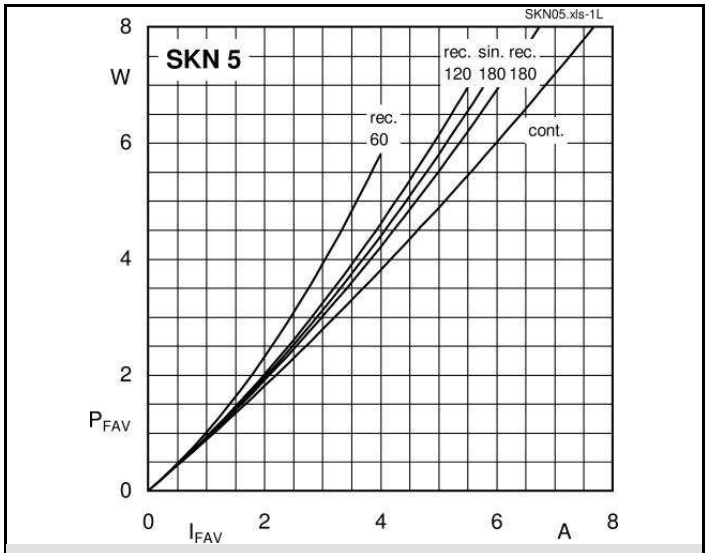


Fig. 1 Power dissipation vs. forward current

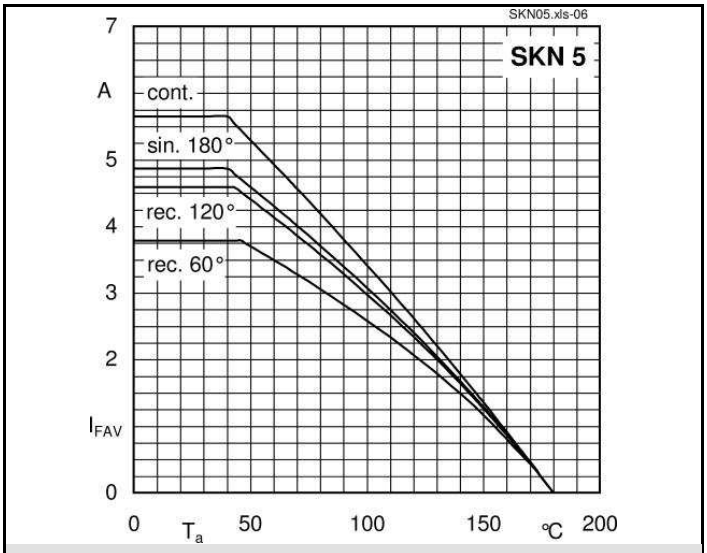


Fig. 4 Forward current vs. ambient temperature

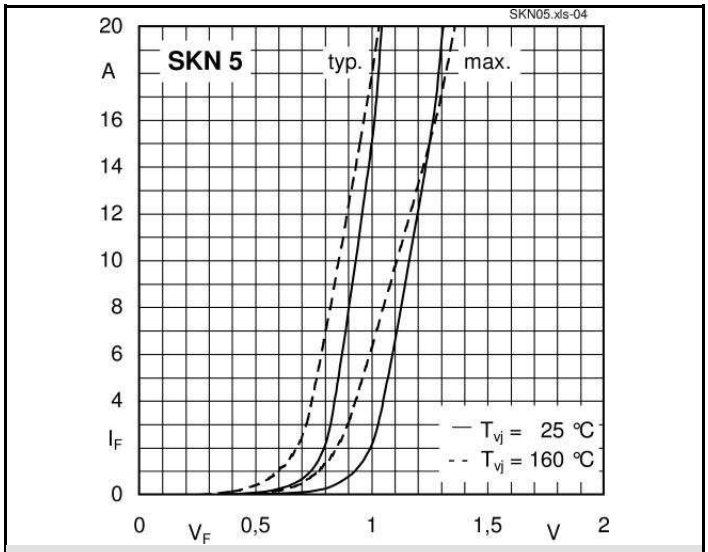


Fig. 5 Forward characteristics

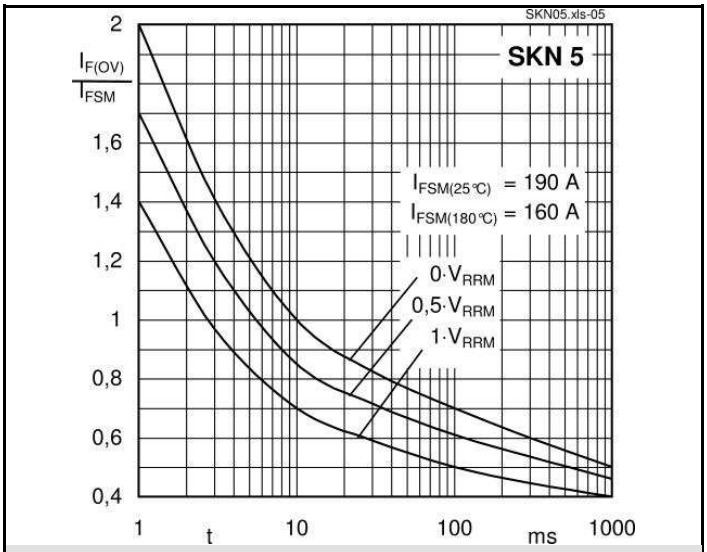


Fig. 6 Surge overload current vs. time

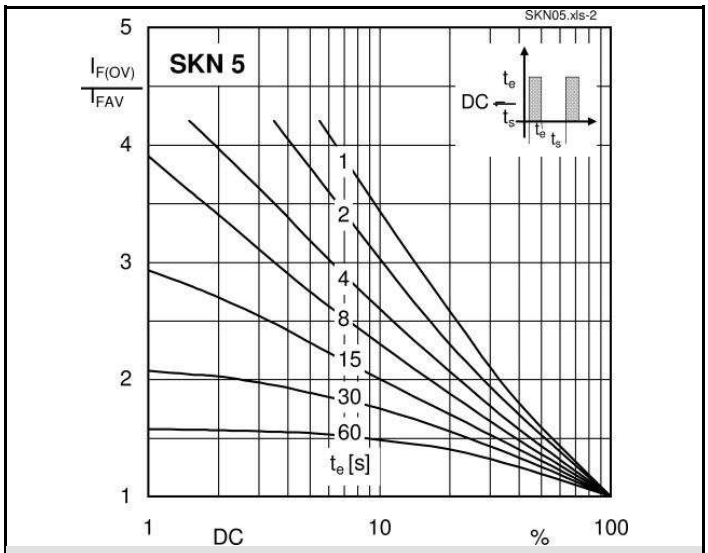
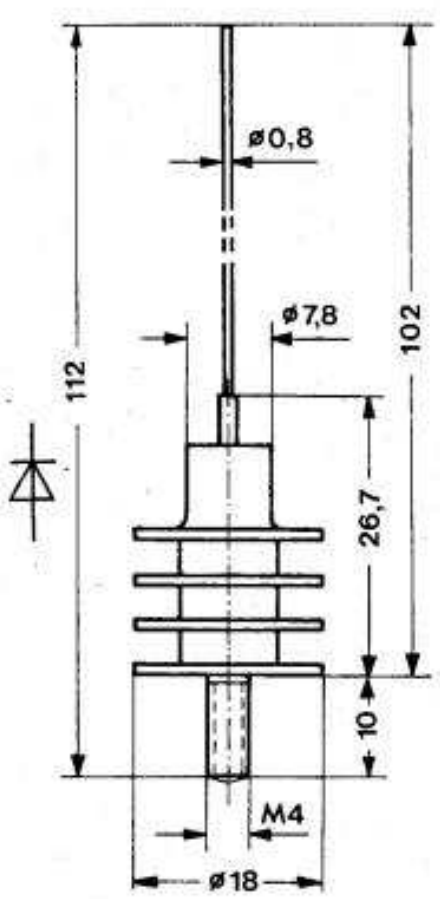


Fig. 7 Rated overload current vs. duty cycle

Dimensions in mm



Case E 6

* The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON products in life support appliances and systems is subject to prior specification and written approval by SEMIKRON. We therefore strongly recommend prior consultation of our personal.

