

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:
 $RC: 0,02 \mu F, 500 \Omega (P_R = 1 W)$
 $R_P = 270 k\Omega (P_R = 2 W)$

V_{RSM} V	V_{RRM} V	$I_{FRMS} = 10 A$ (maximum value for continuous operation) $I_{FAV} = 5 A$ (sin. 180; $T_a = 45^\circ C$)	
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; $T_a = 45^\circ C$	5	A
I_{FSM}	$T_{vj} = 25^\circ C; 10 ms$ $T_{vj} = 180^\circ C; 10 ms$	190 160	A
i^2t	$T_{vj} = 25^\circ C; 8,3 \dots 10 ms$ $T_{vj} = 180^\circ C; 8,3 \dots 10 ms$	180 130	A^2s A^2s
V_F	$T_{vj} = 25^\circ C; I_F = 15 A$	max. 1,25	V
$V_{(TO)}$	$T_{vj} = 180^\circ C$	max. 0,85	V
r_T	$T_{vj} = 180^\circ C$	max. 25	$m\Omega$
I_{RD}	$T_{vj} = 180^\circ C; V_{RD} = V_{RRM}$	max. 2,2	mA
Q_{rr}	$T_{vj} = 160^\circ C; - di_F/dt = 10 A/\mu s$	18	μC
$R_{th(j-c)}$		1,8	K/W
$R_{th(j-a)}$		25	K/W
T_{vj}		- 40 ... + 180	$^\circ C$
T_{stg}		- 55 ... + 180	$^\circ C$
V_{isol}		-	V~
M_s	to heatsink	0,8	Nm
a		5 * 9,81	m/s^2
m	approx.	20	g
Case		E 6	



SKN

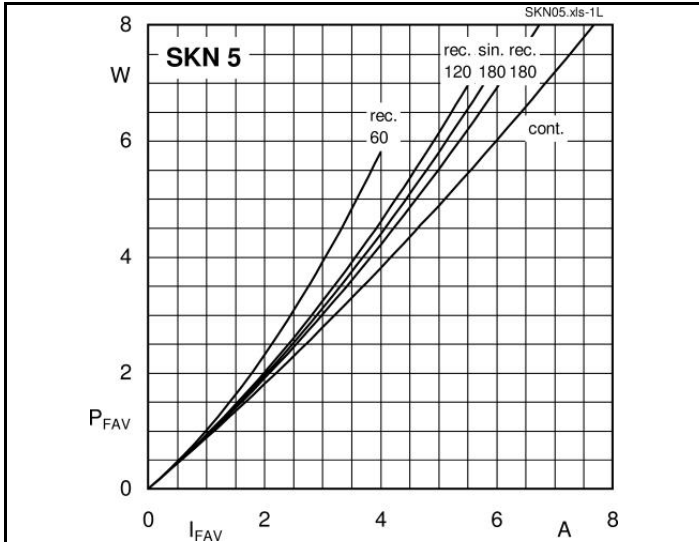


Fig. 1 Power dissipation vs. forward current

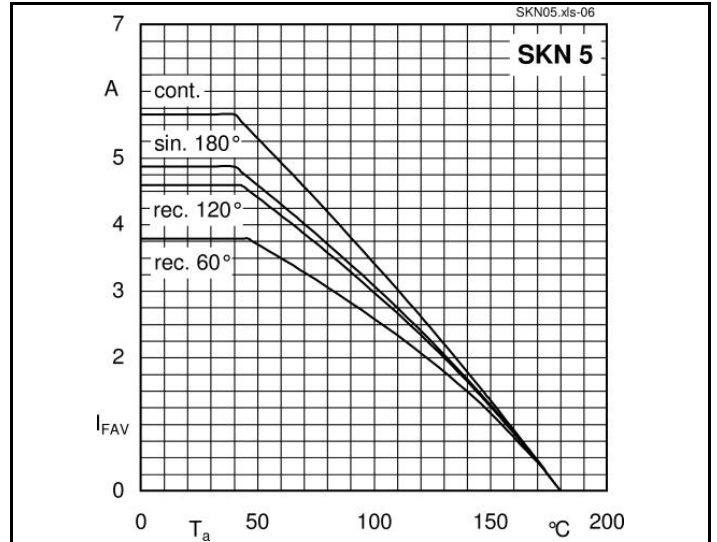


Fig. 4 Forward current vs. ambient temperature

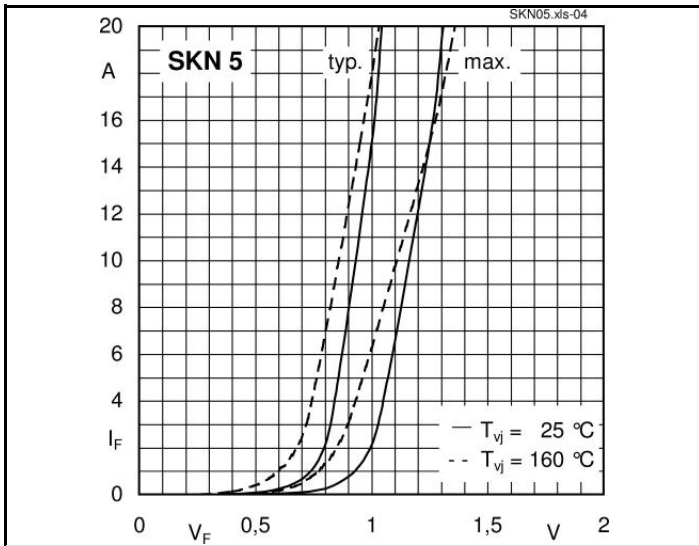


Fig. 5 Forward characteristics

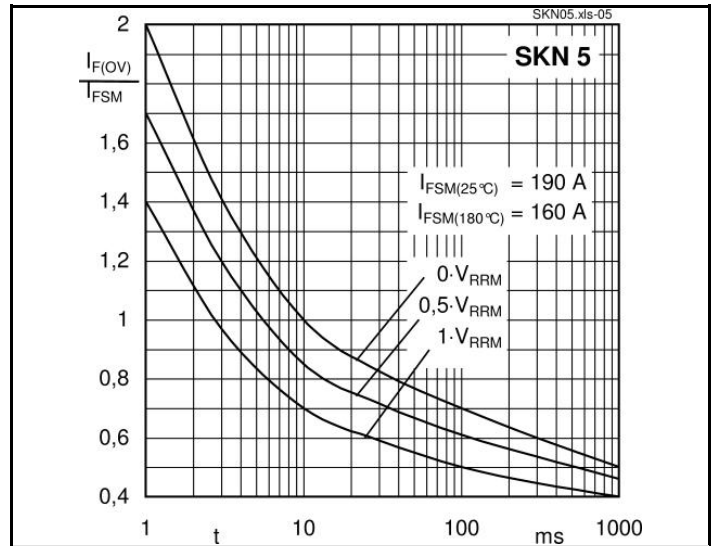


Fig. 6 Surge overload current vs. time

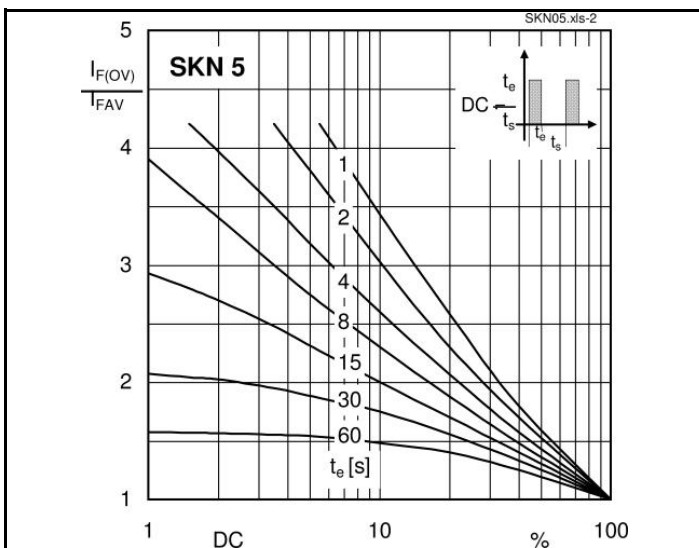
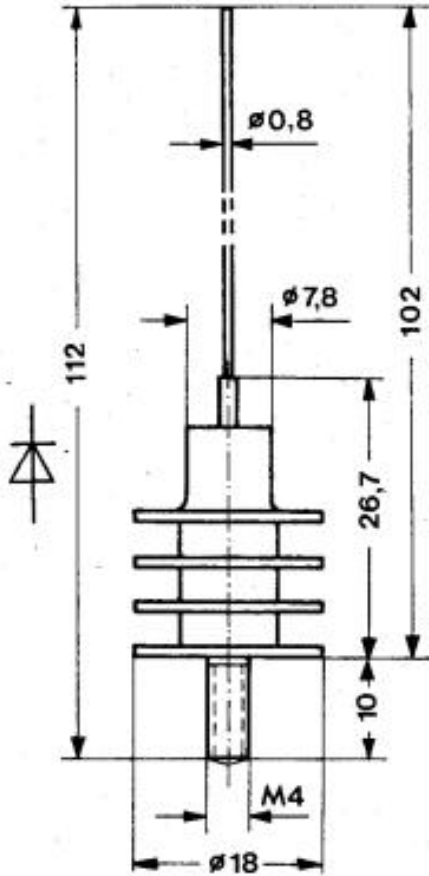


Fig. 7 Rated overload current vs. duty cycle

Dimensions in mm



Case E 6

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