



Stud Diode

Rectifier Diode

SKN 2,5

Features

- Reverse voltages up to 1600 V
- Hermetic metal case with glass insulator
- Anode side threaded stud ISO M4 (with lead wire in addition)
- SKN: anode to stud

Typical Applications

- All-purpose rectifier diodes
- For severe ambient conditions
- Recommended snubber network:
RC: 0,02 μ F, 500 ($P_R = 1$ W)
 $R_P = 270$ k ($P_R = 2$ W)



SKN

V_{RSM}	V_{RRM}	$I_{FRMS} = 5$ A (maximum value for continuous operation)
V	V	$I_{FAV} = 2,5$ A (sin. 180; $T_a = 45$ °C)
400	400	SKN 2,5/04
800	800	SKN 2,5/08
1200	1200	SKN 2,5/12
1600	1600	SKN 2,5/16

Symbol	Conditions	Values	Units
I_{FAV}	sin. 180; $T_a = 45$ (85) °C	2,5 (1,8)	A
I_{FSM}	$T_{vj} = 25$ °C; 10 ms	180	A
	$T_{vj} = 180$ °C; 10 ms	150	A
i^2t	$T_{vj} = 25$ °C; 8,3 ... 10 ms	160	A ² s
	$T_{vj} = 180$ °C; 8,3 ... 10 ms	110	A ² s
V_F	$T_{vj} = 25$ °C; $I_F = 10$ A	max. 1,2	V
$V_{(TO)}$	$T_{vj} = 180$ °C	max. 0,85	V
r_T	$T_{vj} = 180$ °C	max. 30	m
I_{RD}	$T_{vj} = 180$ °C; $V_{RD} = V_{RRM}$	max. 1,5	mA
Q_{rr}	$T_{vj} = 160$ °C; $-di_F/dt = 10$ A/ μ s	15	μ C
$R_{th(j-c)}$		2,5	K/W
$R_{th(j-a)}$		55	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/s ²
m	approx.	6	g
Case		E 5	

Diagrams

SKN02.5.xls-1L

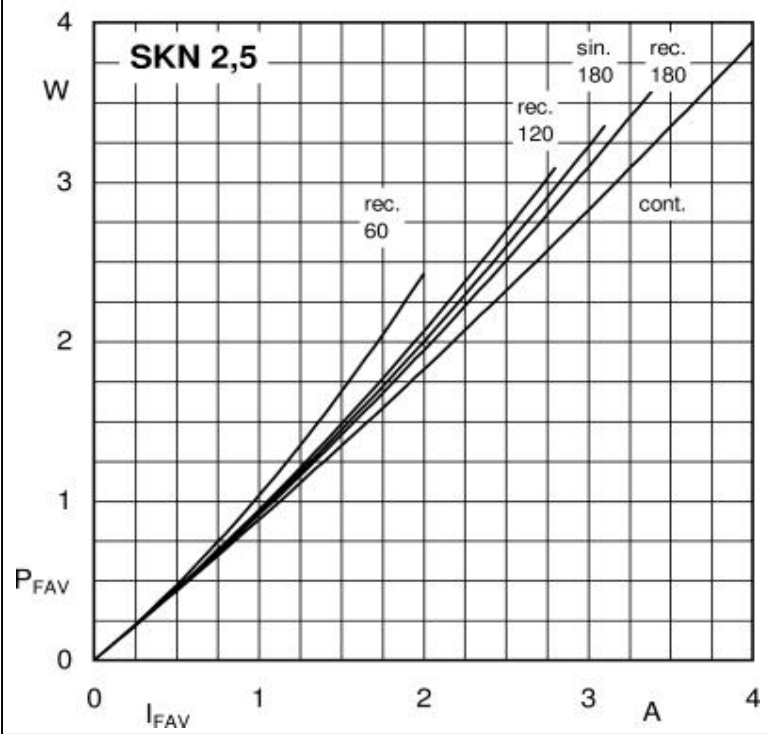


Fig. 1 Power dissipation vs. forward current

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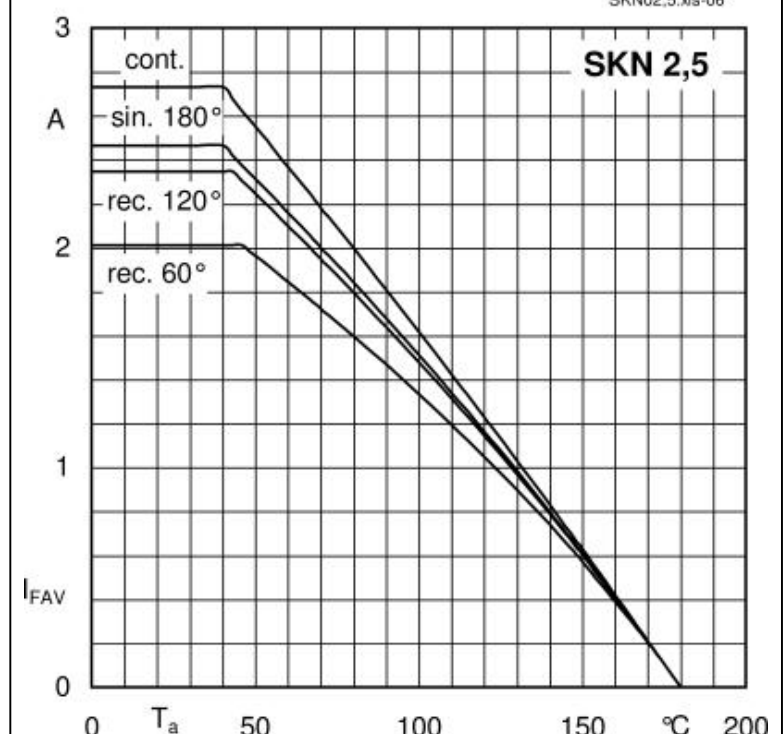


Fig. 3 Forward current vs. ambient temperature

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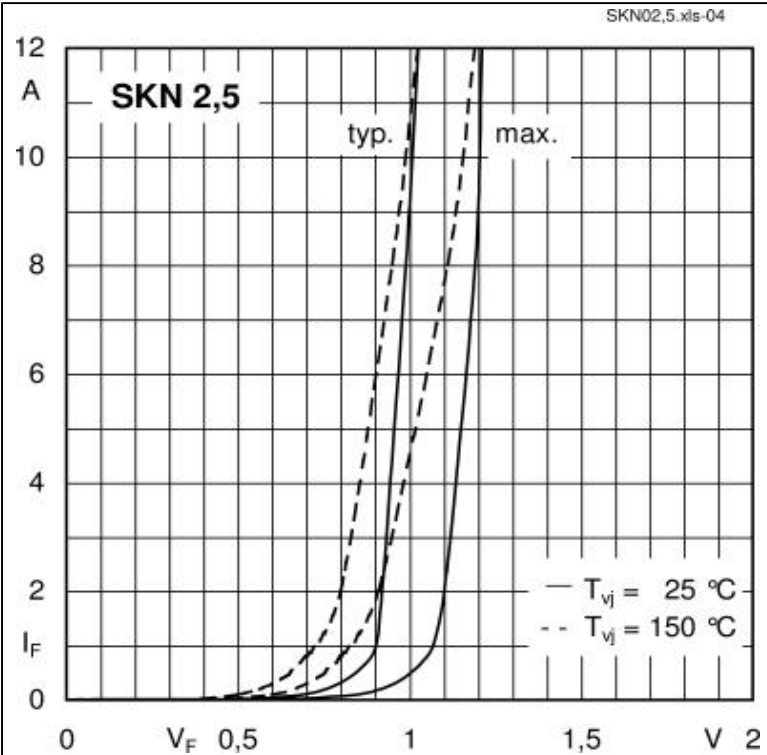


Fig. 5 Forward characteristics

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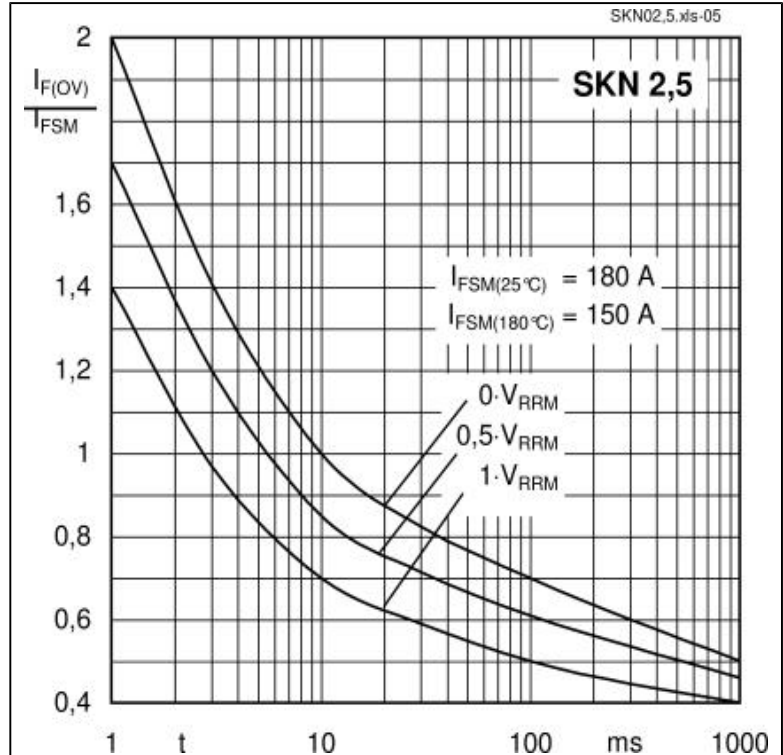


Fig. 6 Surge overload current vs. time

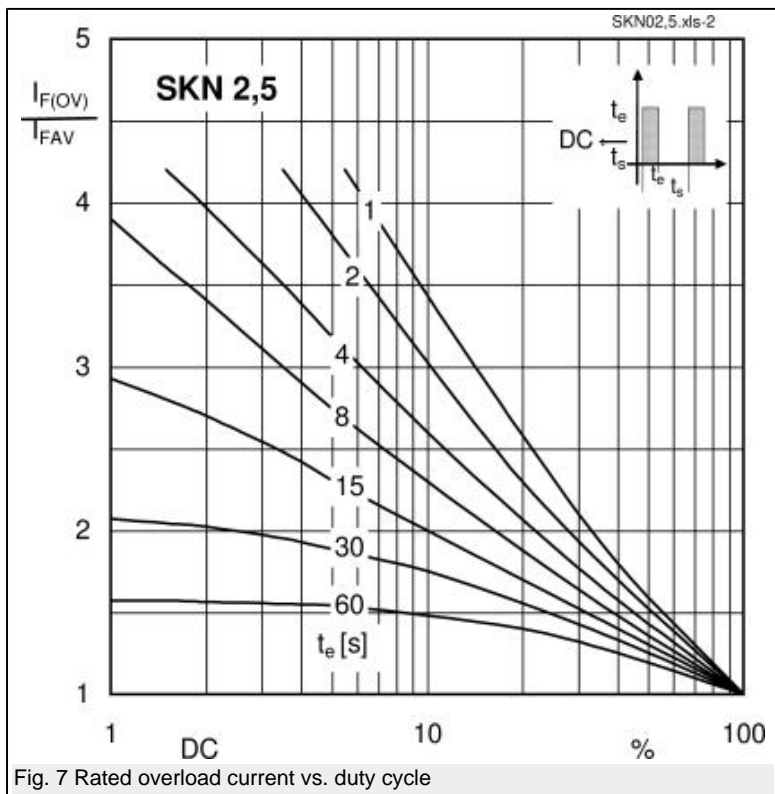
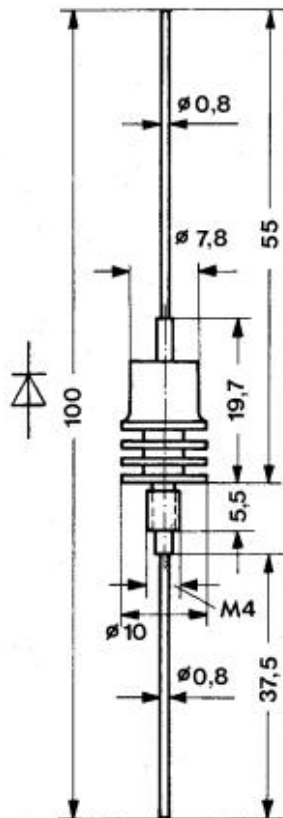


Fig. 7 Rated overload current vs. duty cycle

Cases / Circuits

Dimensions in mm



Case E 5 (IEC 60191: A 2 modified; JEDEC: DO-1 modified)