

SKNa 47



Stud Diode

Avalanche Diode

SKNa 47

Publish Data

Features

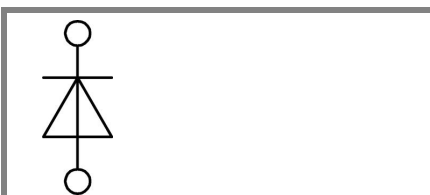
- Avalanche type reverse characteristic
- Reverse voltages up to 5000 V
- Hermetic metal case with ceramic insulator and extra long creepage distances
- Threaded stud ISO M8
- Cooling via heatsinks
- SKN: Anode to stud

Typical Applications

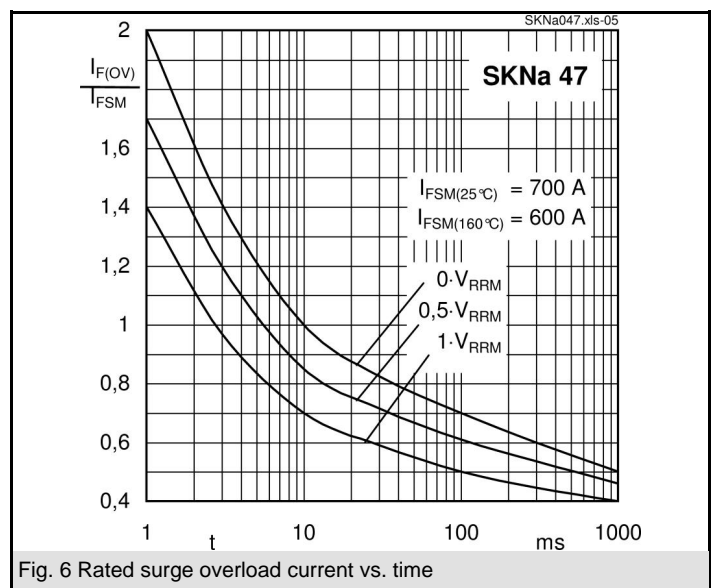
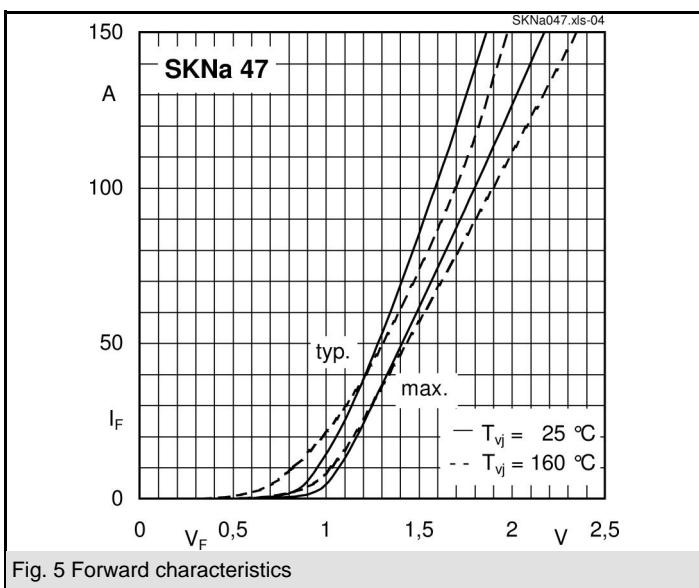
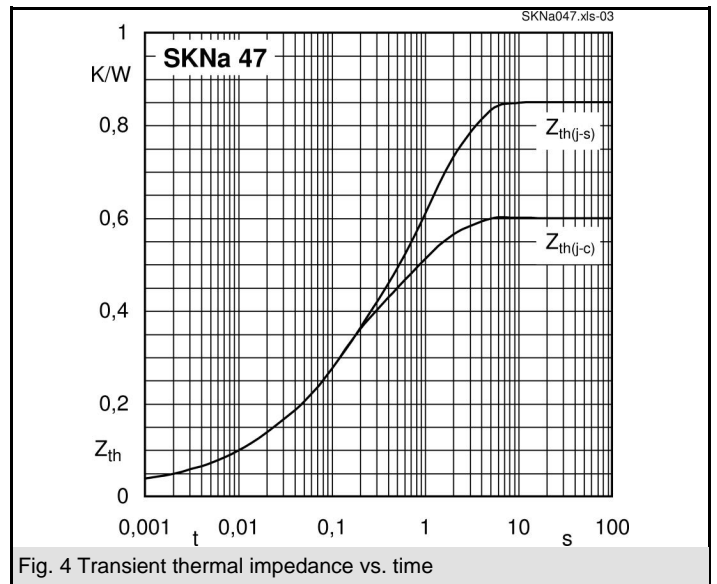
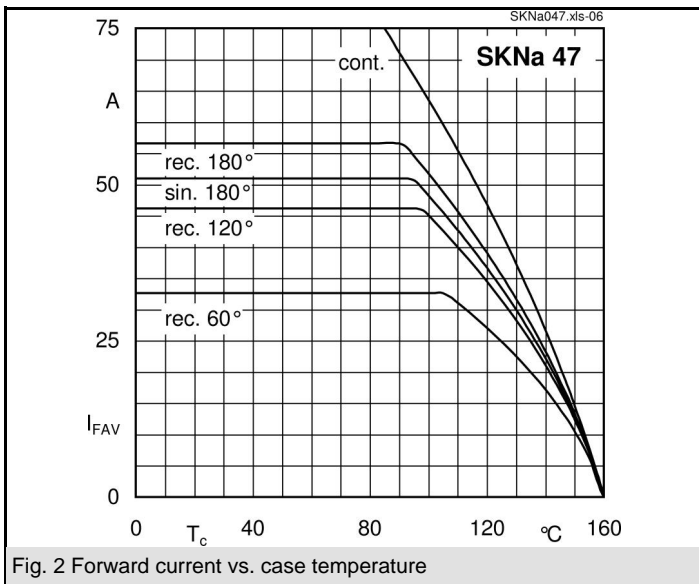
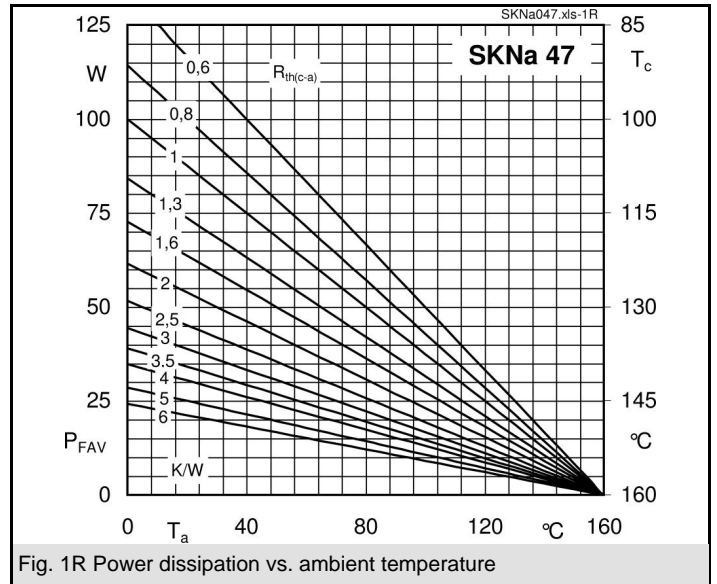
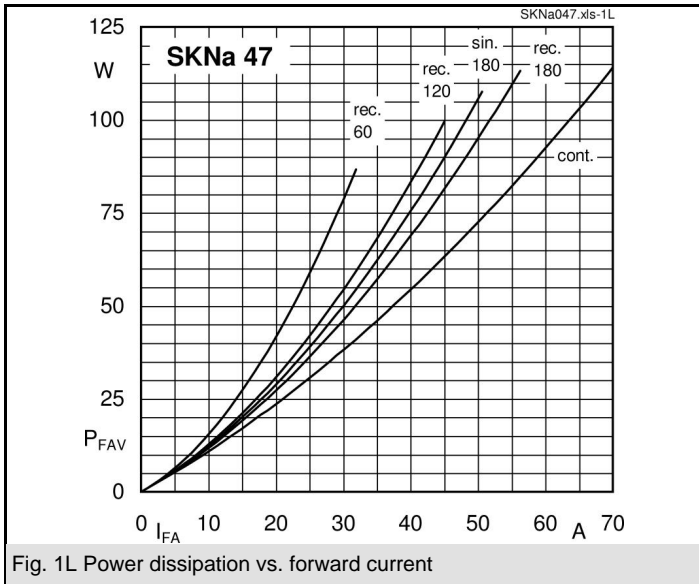
- High voltage rectifier diode for heavy duty applications
- Series connections for high voltage equipments like dust precipitators and high voltage power supplies
- Non-controllable and half-controllable rectifiers
- Free-wheeling diodes

$V_{(BR)min}$	$I_{FRMS} = 80 \text{ A}$ (maximum value for continuous operation)	C_{max}	R_{min}
V	$I_{FAV} = 45 \text{ A}$ (sin. 180; $T_c = 106 \text{ }^\circ\text{C}$)	μF	Ω
3600	SKNa 47/36		
4000	SKNa 47/40		
4200	SKNa 47/42		
4500	SKNa 47/45		
4600	SKNa 47/46		
4800	SKNa 47/48		
5000	SKNa 47/50		

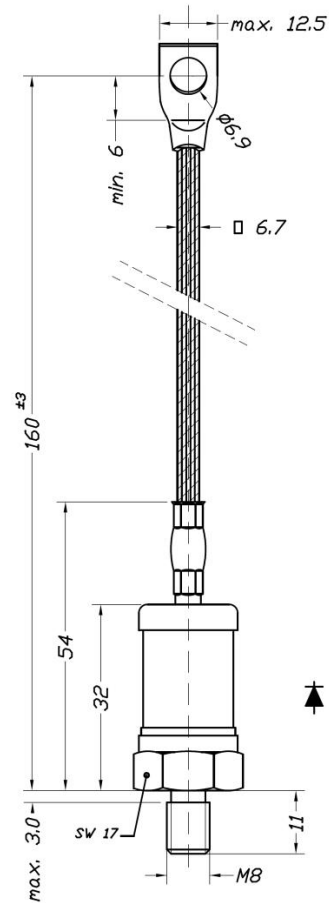
Symbol	Conditions	Values	Units
I_{FAV}	sin. 180 ; $T_c = 96$ (106) $^\circ\text{C}$	50 (45)	A
I_D	K 5; $T_a = 45 \text{ }^\circ\text{C}$; B2 / B6	32 / 47	A
	K 1,1; $T_a = 45 \text{ }^\circ\text{C}$; B2 / B6	68 / 96	A
I_{FSM}	$T_{vj} = 25 \text{ }^\circ\text{C}$; 10 ms	700	A
	$T_{vj} = 160 \text{ }^\circ\text{C}$; 10 ms	600	A
i^2t	$T_{vj} = 25 \text{ }^\circ\text{C}$; 8,3 ... 10 ms	2500	A^2s
	$T_{vj} = 160 \text{ }^\circ\text{C}$; 8,3 ... 10 ms	1800	A^2s
V_F	$T_{vj} = 25 \text{ }^\circ\text{C}$; $I_F = 100 \text{ A}$	max. 1,8	V
$V_{(TO)}$	$T_{vj} = 150 \text{ }^\circ\text{C}$	max. 1	V
r_T	$T_{vj} = 150 \text{ }^\circ\text{C}$	max. 9	$\text{m}\Omega$
I_{RD}	$T_{vj} = 25 \text{ }^\circ\text{C}$; $V_{RD} = V_{(BR)min}$	max. 600	μA
	$T_{vj} = 160 \text{ }^\circ\text{C}$; $V_{RD} = V_{(BR)min}$	max. 10	mA
P_{RSM}	$T_{vj} = 160 \text{ }^\circ\text{C}$; $t_p = 10 \mu\text{s}$	20	kW
$R_{th(j-c)}$		0,6	K/W
$R_{th(c-s)}$		0,25	K/W
T_{vj}		- 40 ... + 160	$^\circ\text{C}$
T_{stg}		- 40 ... + 160	$^\circ\text{C}$
V_{isol}		-	V~
M_s	to heatsink	4	Nm
		35	lb.in.
a		5 * 9,81	m/s^2
m	approx.	45	g
Case		E 43	



SKN



Dimensions in mm



CASE E 43 (IEC 60191: A 16 U modified)

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