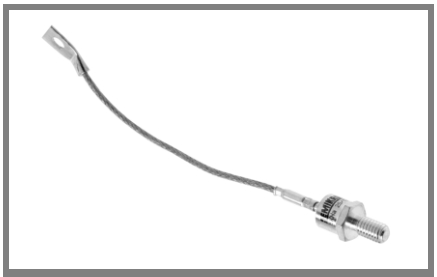
SKNa 20



Stud Diode

Avalanche Diode

SKNa 20

Features

- Avalanche type reverse characteristic up to 1700
- Hermetic metal case with glass insulator
- Anode side threaded stud ISO M6x1
- Cooling via metal plates or heatsinks
- **SKN:** Anode to stud

Typical Applications *

- DC supply for magnets or solenoids (brakes, valves, etc.)
- Field coil supply for DC motors
- Series connections for high voltage applications (dust precipitators)

SKN

$V_{(BR)min}$ V	I_{FRMS} = 40 A (maximum value for continuous operation) I_{FAV} = 20 A (sin. 180; T_c = 93 ºC)
1300	SKNa 20/13
1700	SKNa 20/17

Symbol	Condition	Values	Units
I_{FAV}	sin. 180 ; T_C = 85 (100) ºC	22 (18)	A
I_D	K 9; T_a = 45°C; B2 / B6	17 / 24	A
	K 3; T_a = 45°C; B2 / B6	30 / 42	A
I_{FSM}	T_{vj} = 25º C ; 10 ms	375	A
	T_{vj} = 150º C ; 10 ms	320	A
i^2t	T_{vj} = 25º C ; 8,3...10 ms	700	A^2s
	T_{vj} = 150º C ; 8,3...10 ms	510	A^2s
V_F	T_{vj} = 25º C, I_F = 60 A	max. 1,55	V
$V_{(TO)}$	T_{vj} = 150º C	max. 0,85	V
r_T	T_{vj} = 150º C	max. 11	mΩ
I_{RD}	T_{vj} = 25º C ; V_{RD} = $V_{(BR)min}$	max. 10	mA
P_{RSM}	T_{vj} = 150°C, t_p = 10 µs	6	kW
$R_{th(j-c)}$		2	K/W
$R_{th(c-s)}$		1	K/W
T_{vj}		-40...+150	°C
T_{stg}		-55...+180	°C
V_{isol}		-	V~
M_s	M6 Stud	2	Nm
a		5 * 9,81	m/s^2
m	approx.	11	g
Case		E 9	

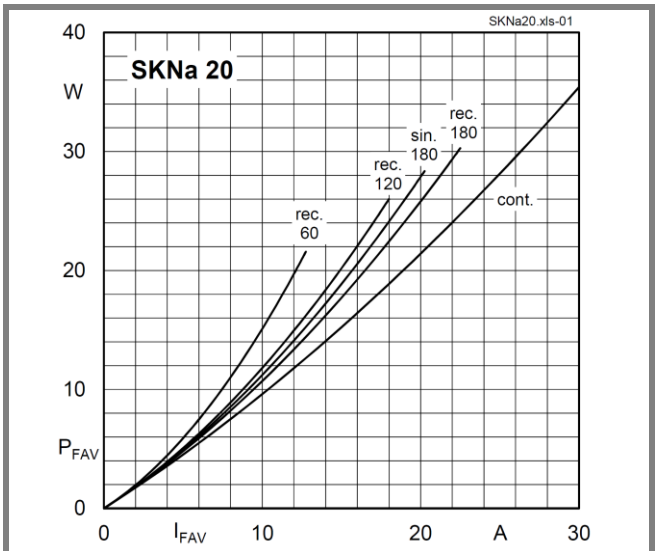


Fig. 1L Power dissipation vs. forward current

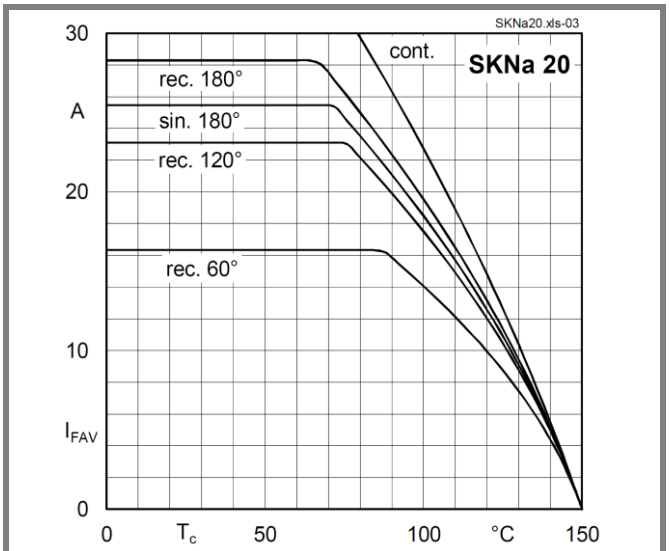


Fig. 3 Forward current vs. case temperature

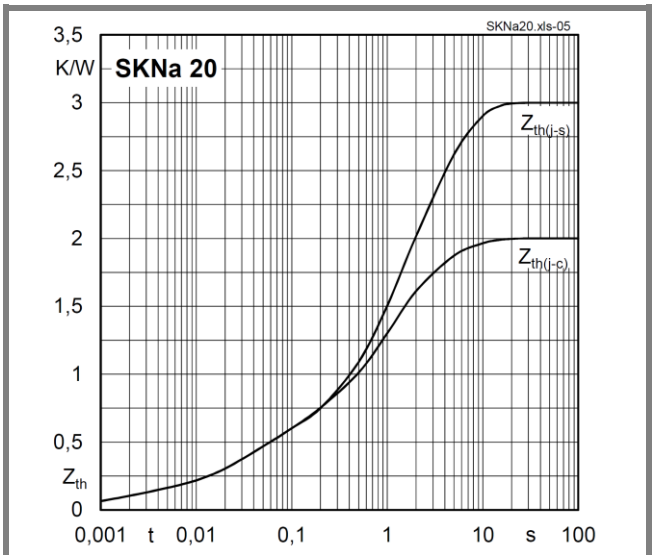


Fig. 5 Transient thermal impedance vs. time

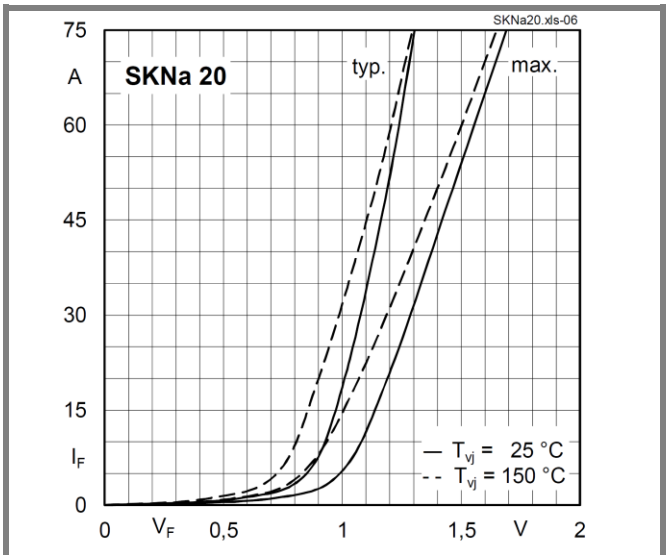


Fig. 6 Forward characteristics

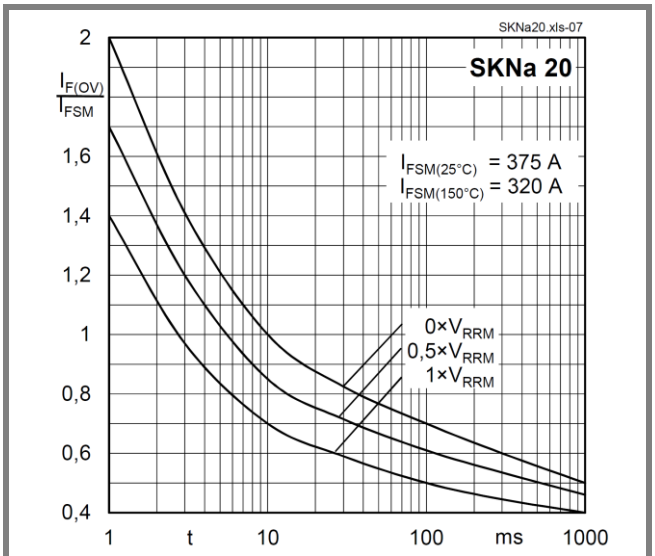


Fig. 7 Rated surge overload current vs. time

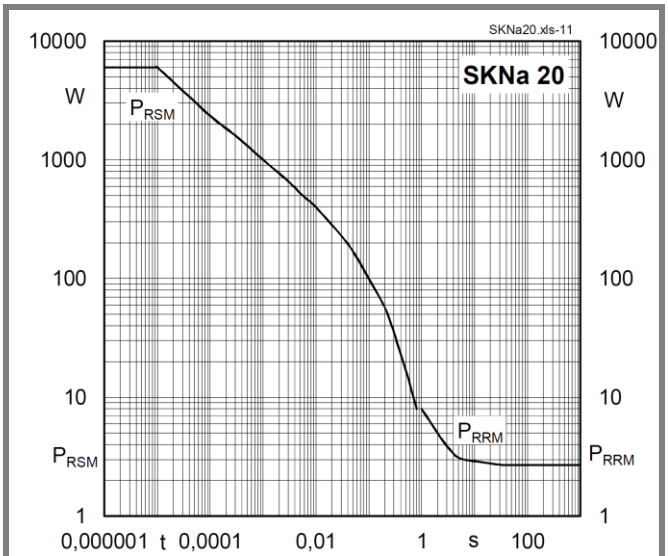
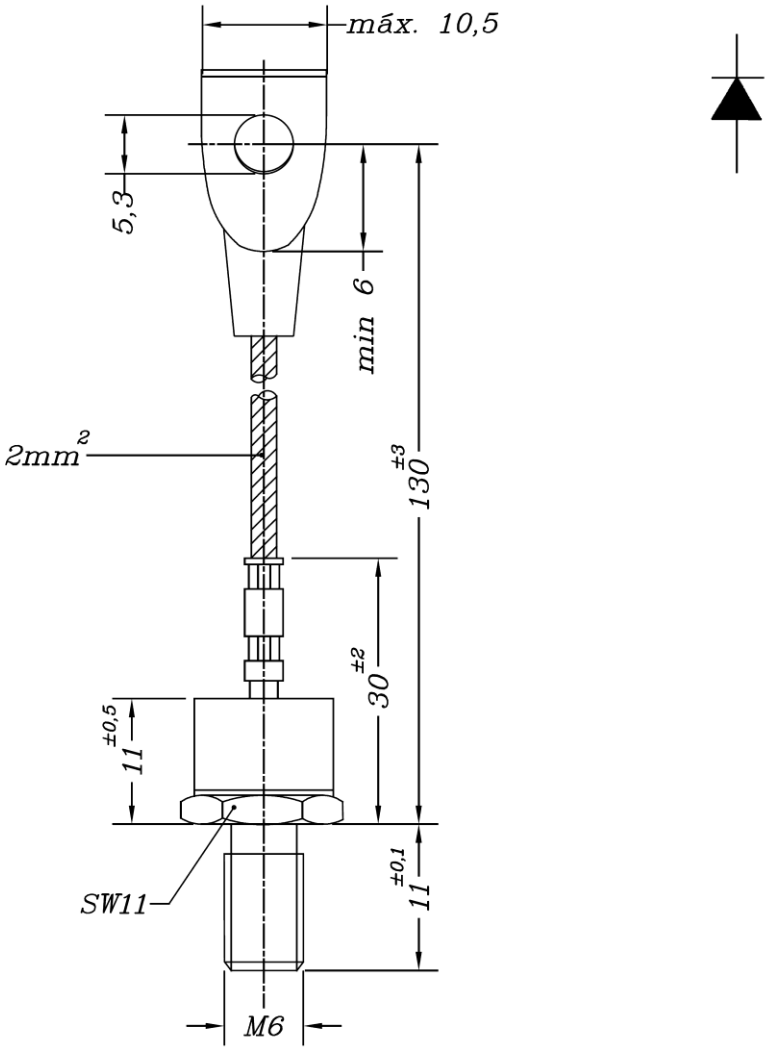


Fig. 11 Reverse power dissipation vs. time

Dimensions in mm



Case E9 (IEC 60191: A 16 M modified)

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