

Stud Diode

Avalanche Diode

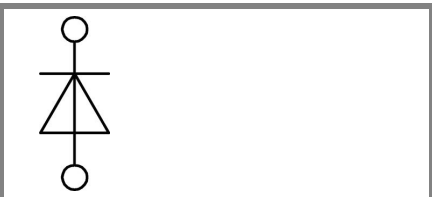
SKNa 2

Features

- Avalanche type reverse characteristic up to 1700V
- Transient voltage proof within specified limits
- Hermetic metal case with glass insulator
- Anode side threaded stud ISO M4 with lead wire in addition
- SKN: Anode to stud

Typical Applications

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



SKN

$V_{(BR)min}$	$I_{FRMS} = 5\text{ A}$ (maximum value for continuous operation)	C_{max}	R_{min}
V	$I_{FAV} = 2\text{ A}$ (sin. 180; $T_a = 45\text{ °C}$)	μF	Ω
1300	SKNa 2/13		
1700	SKNa 2/17		

Symbol	Conditions	Values	Units
I_{FAV}	sin. 180; $T_a = 45\text{ (85) °C}$	2 (1,25)	A
I_{FAV}	rec. 120; $T_a = 45\text{ °C}$	1,9	A
I_{FSM}	$T_{vj} = 25\text{ °C}$; 10 ms	180	A
	$T_{vj} = 150\text{ °C}$; 10 ms	150	A
i^2t	$T_{vj} = 25\text{ °C}$; 8,3 ... 10 ms	160	A ² s
	$T_{vj} = 150\text{ °C}$; 8,3 ... 10 ms	110	A ² s
V_F	$T_{vj} = 25\text{ °C}$; $I_F = 10\text{ A}$	max. 1,2	V
$V_{(TO)}$	$T_{vj} = 150\text{ °C}$	max. 0,85	V
r_T	$T_{vj} = 150\text{ °C}$	max. 30	m Ω
I_{RD}	$T_{vj} = 150\text{ °C}$; $V_{RD} = V_{(BR)min}$	max. 600	μA
P_{RSM}	$T_{vj} = 150\text{ °C}$; $t_p = 10\text{ }\mu\text{s}$	3	kW
$R_{th(j-c)}$		2,5	K/W
$R_{th(j-a)}$		55	K/W
T_{vj}		- 40 ... + 150	°C
T_{stg}		- 40 ... + 180	°C
V_{isol}		-	V~
M_s		0,8	Nm
a		5 * 9,81	m/s ²
m	approx.	6	g
Case		E 5	

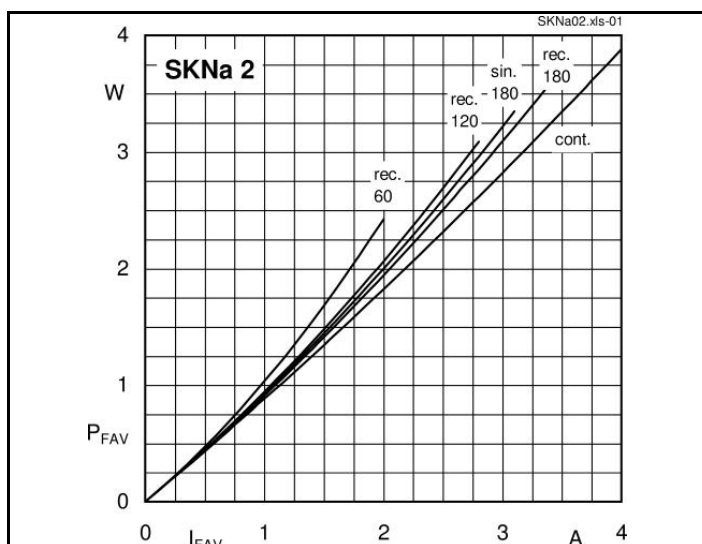


Fig. 1 Power dissipation vs. forward current

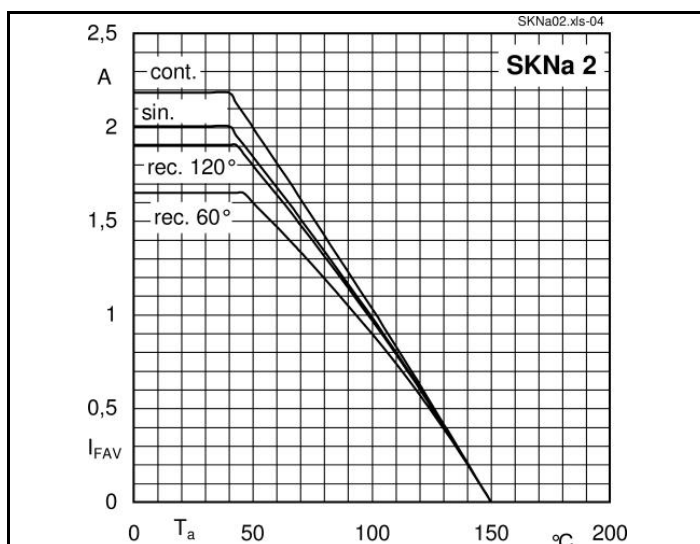


Fig. 3 Forward current vs. ambient temperature

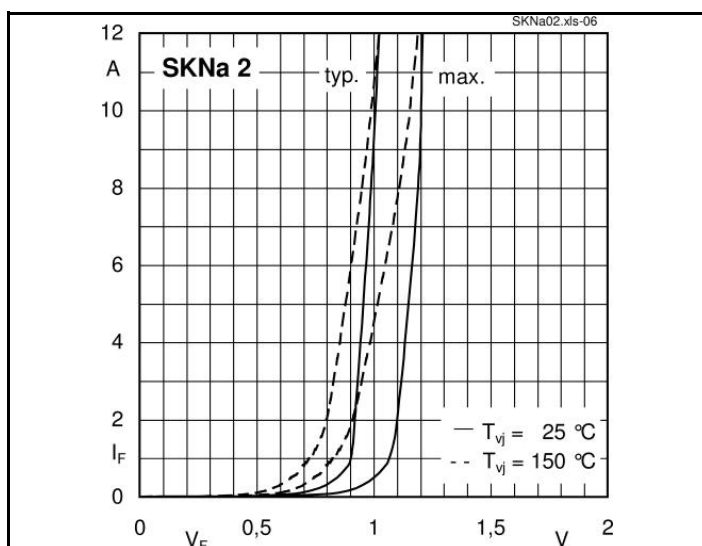


Fig. 5 Forward characteristics

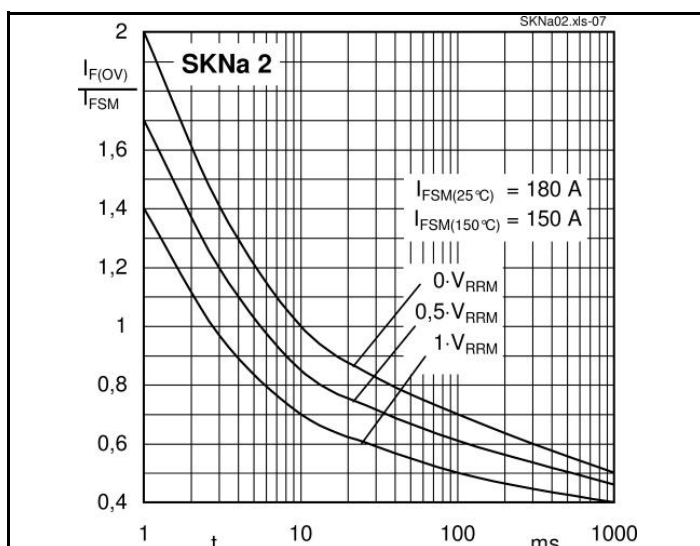


Fig. 6 Rated surge overload current vs. time

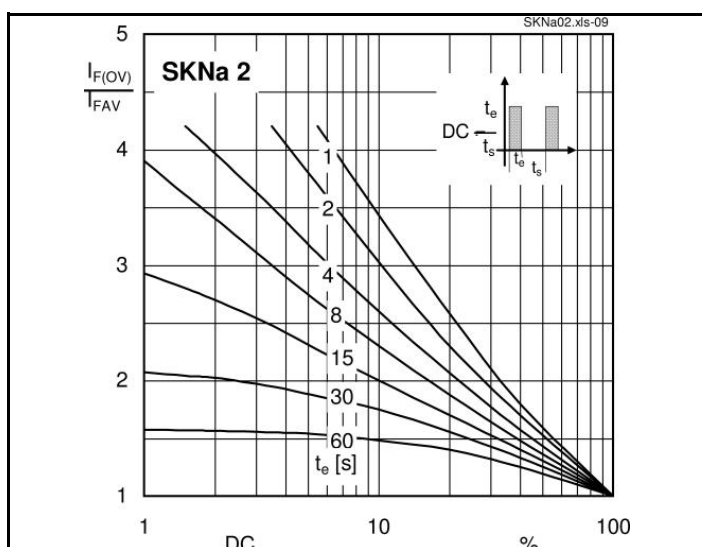


Fig. 7 Rated overload current vs. duty cycle

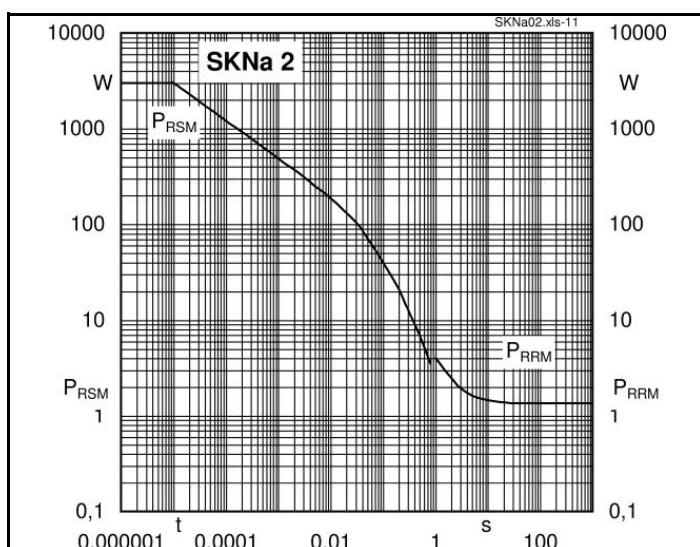
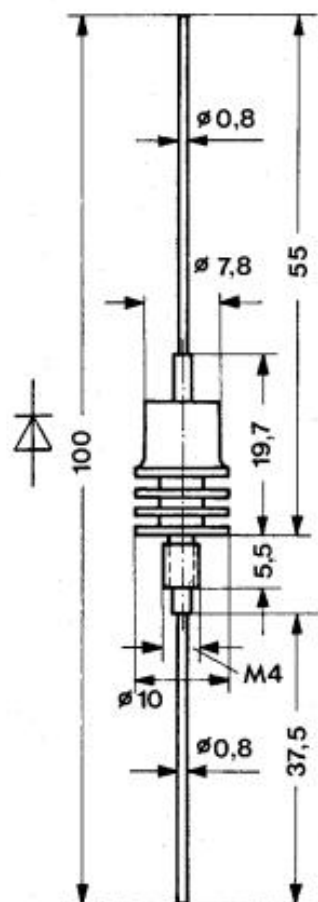


Fig. 9 Reverse power dissipation vs. time

Dimensions in mm



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

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