

Stud Diode

Avalanche Diode

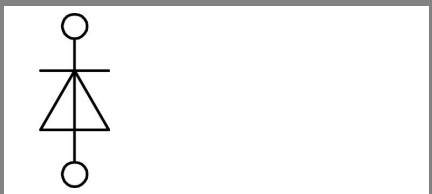
SKNa 2

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; $T_a = 45\text{ °C}$ )	$\mu\text{F}$	$\Omega$
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 <sup>2</sup> s
	$T_{vj} = 150\text{ °C}$ ; 8,3 ... 10 ms	110	A <sup>2</sup> 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 $\Omega$
$I_{RD}$	$T_{vj} = 150\text{ °C}$ ; $V_{RD} = V_{(BR)min}$	max. 600	$\mu\text{A}$
$P_{RSM}$	$T_{vj} = 150\text{ °C}$ ; $t_p = 10\text{ }\mu\text{s}$	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 <sup>2</sup>
m	approx.	6	g
Case		E 5	

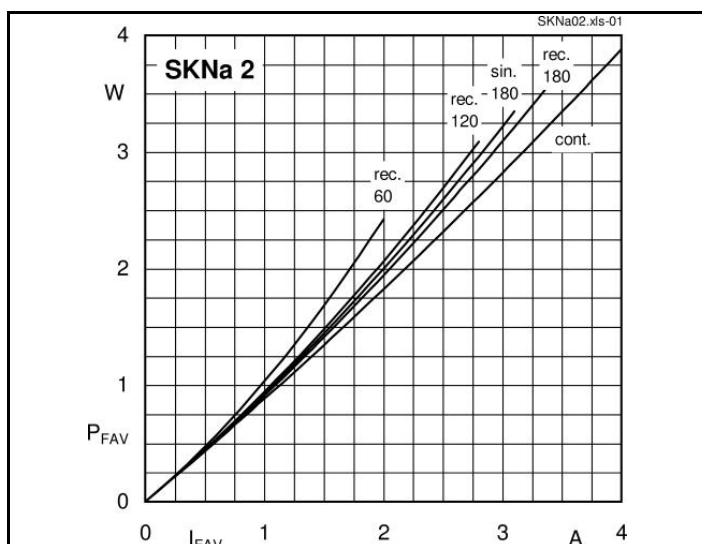


Fig. 1 Power dissipation vs. forward current

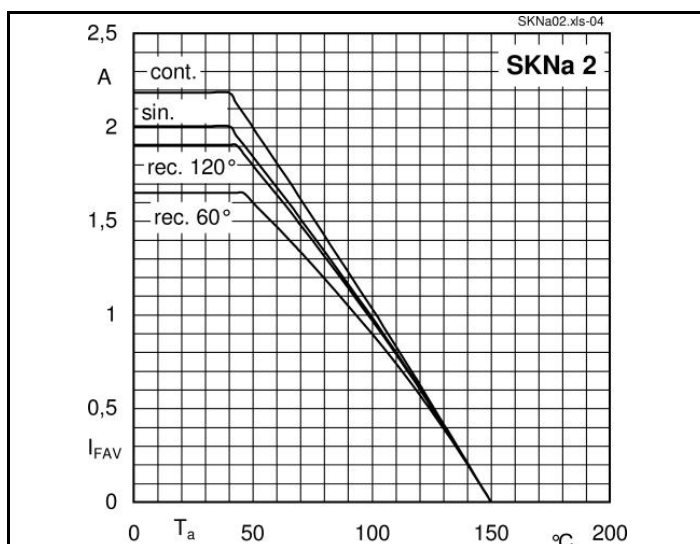


Fig. 3 Forward current vs. ambient temperature

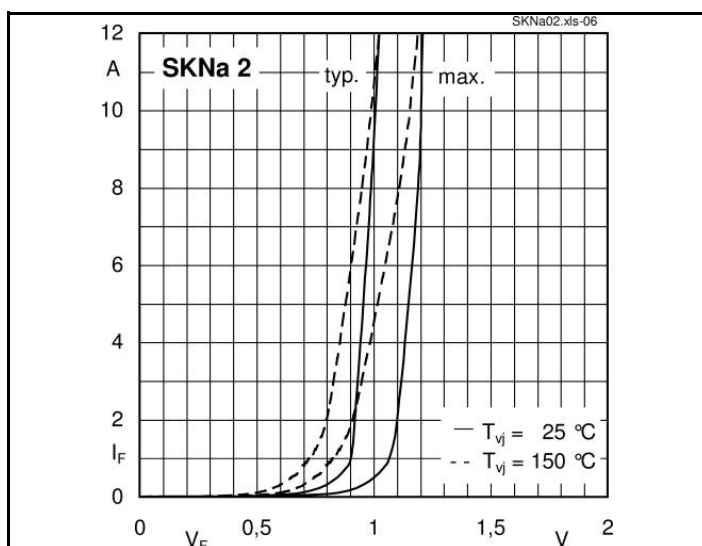


Fig. 5 Forward characteristics

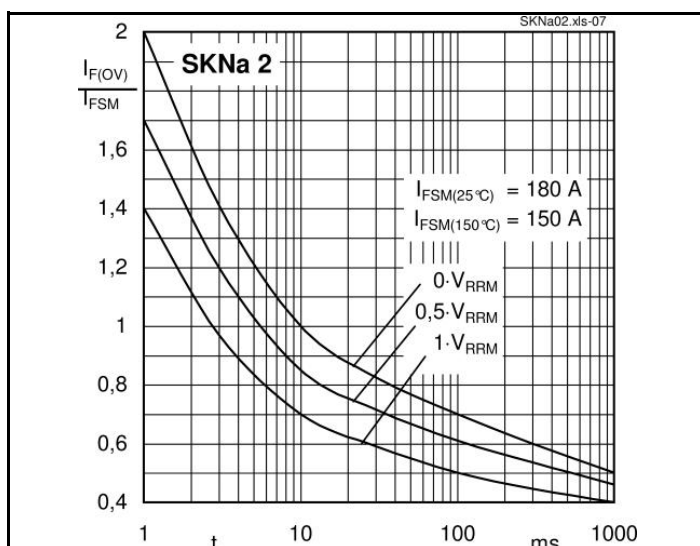


Fig. 6 Rated surge overload current vs. time

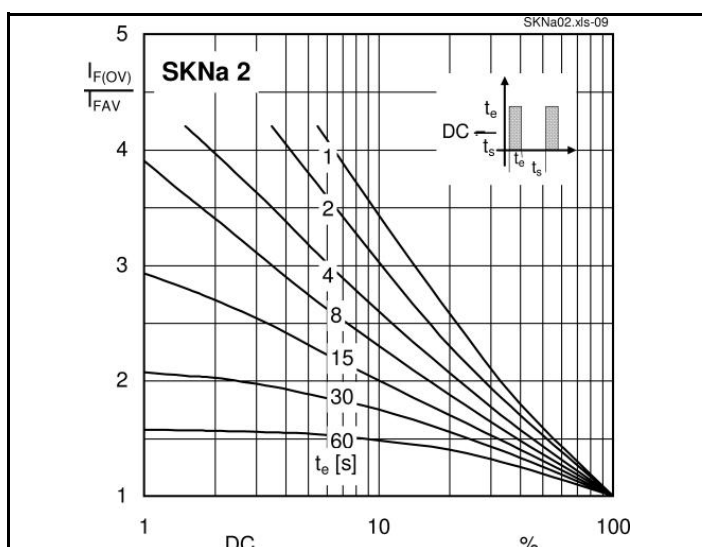


Fig. 7 Rated overload current vs. duty cycle

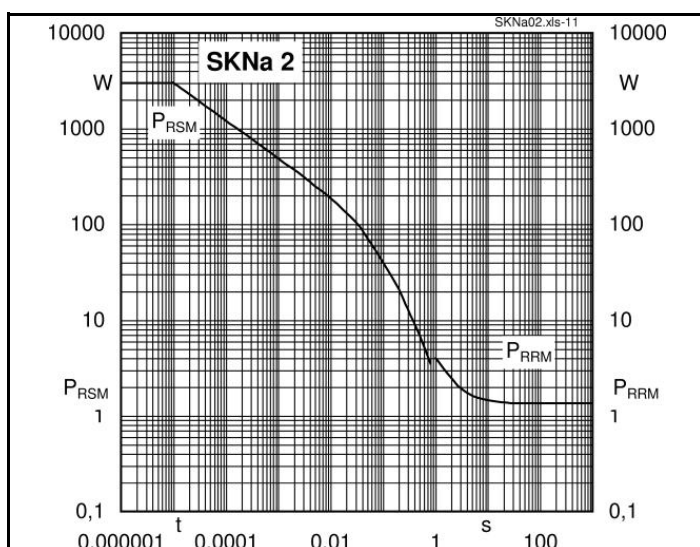
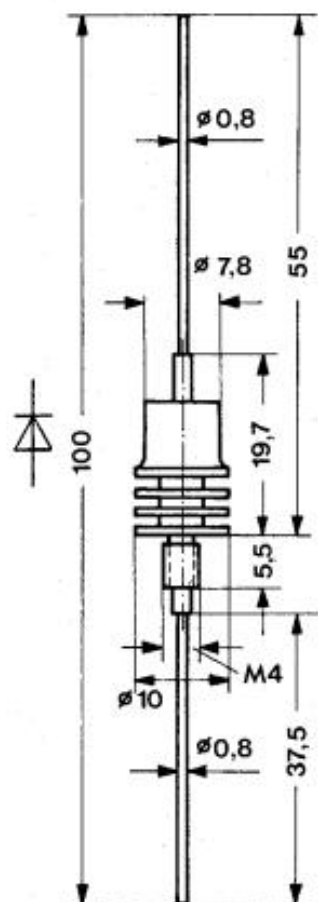


Fig. 9 Reverse power dissipation vs. time

Dimensions in mm



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

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