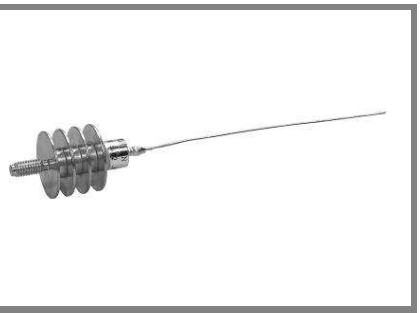
SKNa 4



Stud Diode

Avalanche Diode

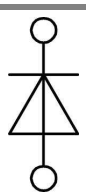
SKNa 4

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
- Integrated cooling fins
- 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

$V_{(BR)min}$ V	I_{FRMS} = 10 A (maximum value for continuous operation) I_{FAV} = 4 A (sin. 180; T_a = 35 °C)	C_{max} µF	R_{min} Ω
1300	SKNa 4/13		
1700	SKNa 4/17		

Symbol	Conditions	Values	Units
I_{FAV}	sin. 180; T_a = 45 (85) °C	3,7 (2,9)	A
I_{FAV}	rec. 120; T_a = 45 °C	3,5	
I_{FSM}	T_{vj} = 25 °C; 10 ms	190	A
	T_{vj} = 150 °C; 10 ms	160	A
i²t	T_{vj} = 25 °C; 8,3 ... 10 ms	180	A²s
	T_{vj} = 150 °C; 8,3 ... 10 ms	130	A²s
V_F	T_{vj} = 25 °C; I_F = 10 A	max. 1,2	V
$V_{(TO)}$	T_{vj} = 150 °C	max. 0,85	V
r_T	T_{vj} = 150 °C	max. 30	mΩ
I_{RD}	T_{vj} = 150 °C; V_{RD} = $V_{(BR)min}$	max. 600	µA
P_{RSM}	T_{vj} = 150 °C; t_p = 10 µs	3	kW
$R_{th(j-c)}$		1,8	K/W
$R_{th(j-a)}$		25	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/s²
m	approx.	20	g
Case		E 6	

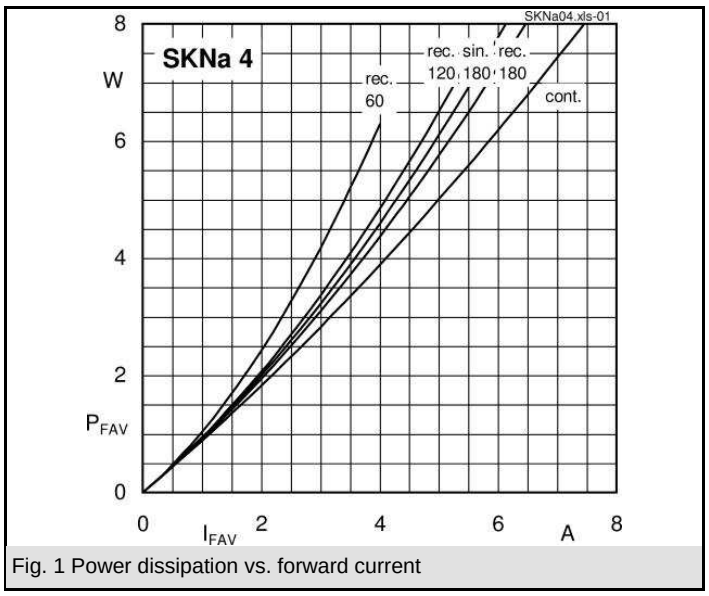


Fig. 1 Power dissipation vs. forward current

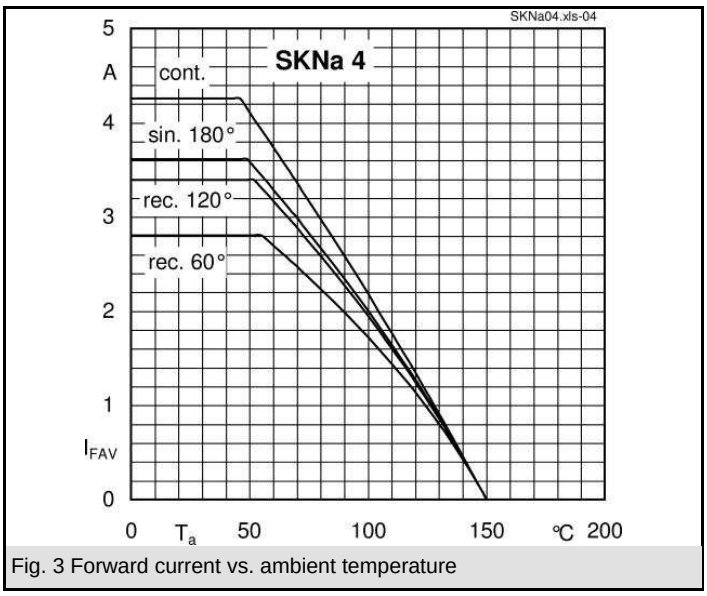


Fig. 3 Forward current vs. ambient temperature

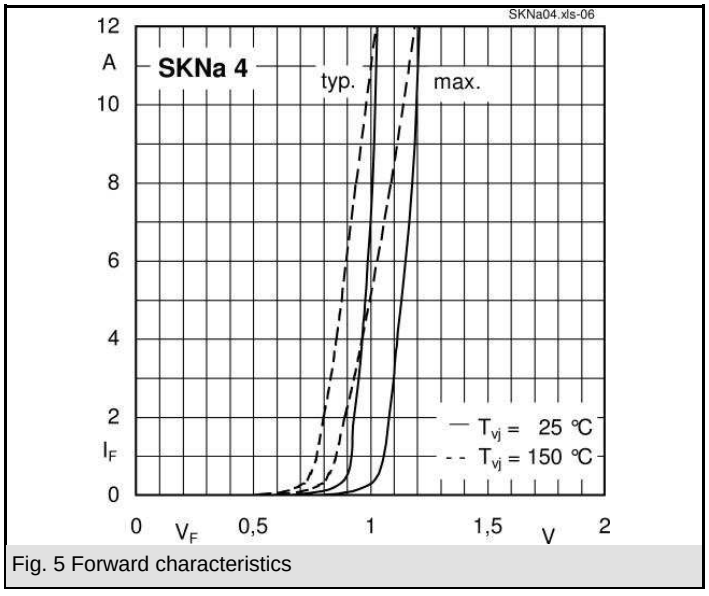


Fig. 5 Forward characteristics

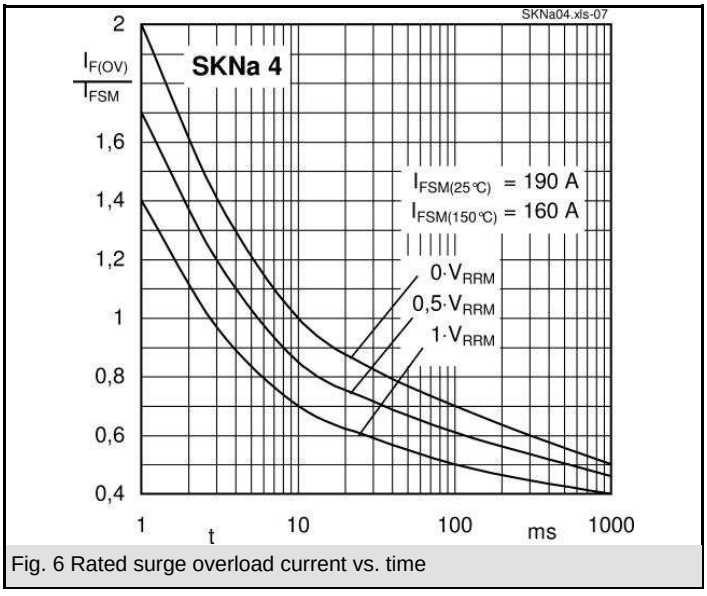


Fig. 6 Rated surge overload current vs. time

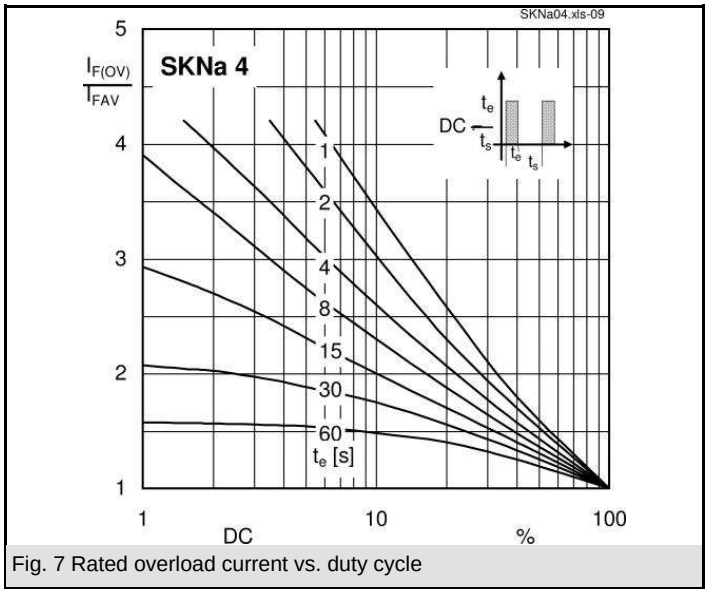


Fig. 7 Rated overload current vs. duty cycle

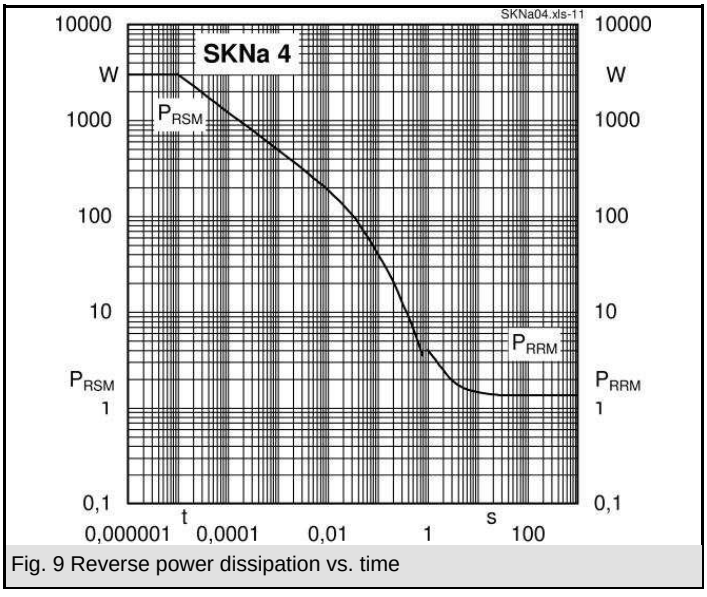
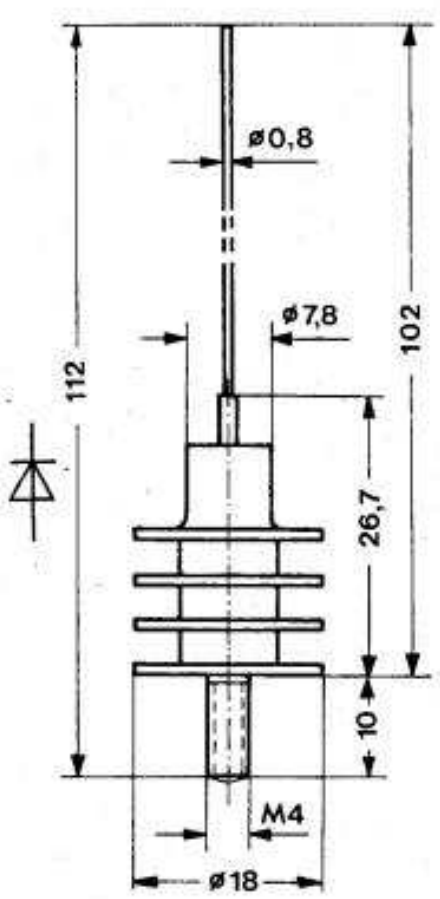


Fig. 9 Reverse power dissipation vs. time

SKNa 4

Dimensions in mm



CASE E 6

* The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON products in life support appliances and systems is subject to prior specification and written approval by SEMIKRON. We therefore strongly recommend prior consultation of our personal.

