



**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 M
- Cooling via metal plates or heat sinks
- 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)

$V_{(BR)min}$	$I_{FRMS} = 40 \text{ A}$ (maximum value for continuous operation)	$C_{max}$	$R_{min}$
V	$I_{FAV} = 20 \text{ A}$ (sin. 180; $T_c = 93 \text{ }^\circ\text{C}$ )	$\mu\text{F}$	$\Omega$
1300	SKNa 20/13		
1700	SKNa 20/17		

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



**SKN**



