

# SKN 400



**Stud Diode**

## Rectifier Diode

### SKN 400

#### Features

- Reverse voltages up to 3000 V
- Hermetic metal case with ceramic insulator with extra long creepage distances
- Threaded stud ISO M24 x 1,5
- SKN: anode to stud

#### Typical Applications

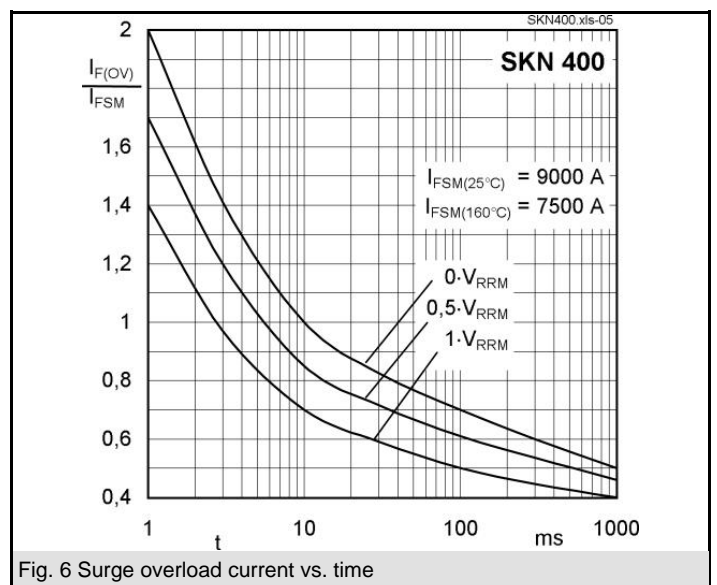
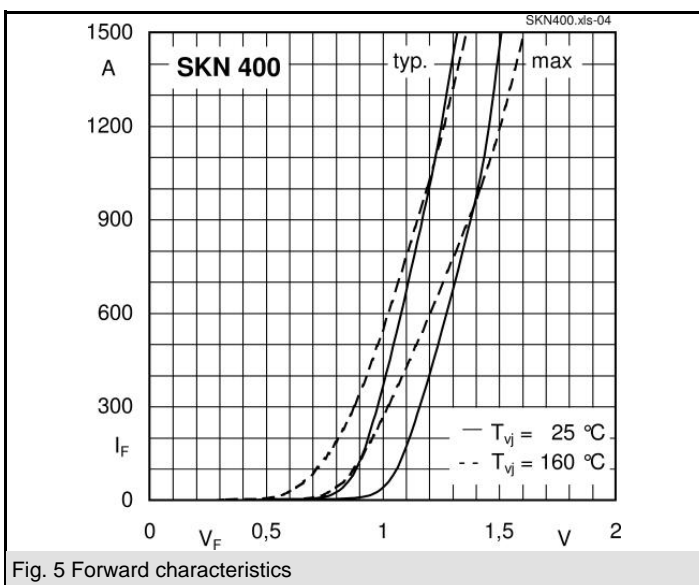
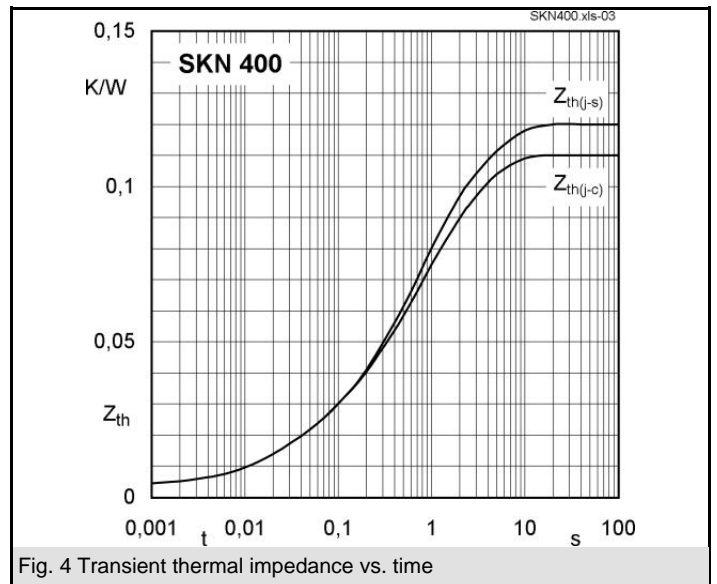
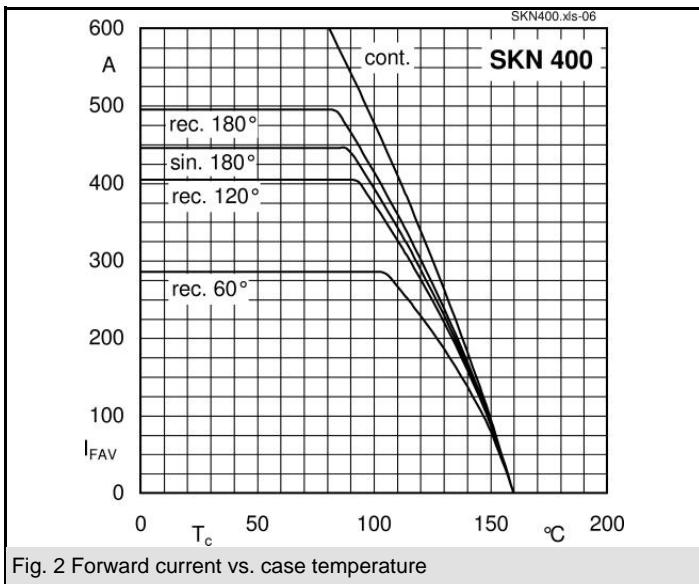
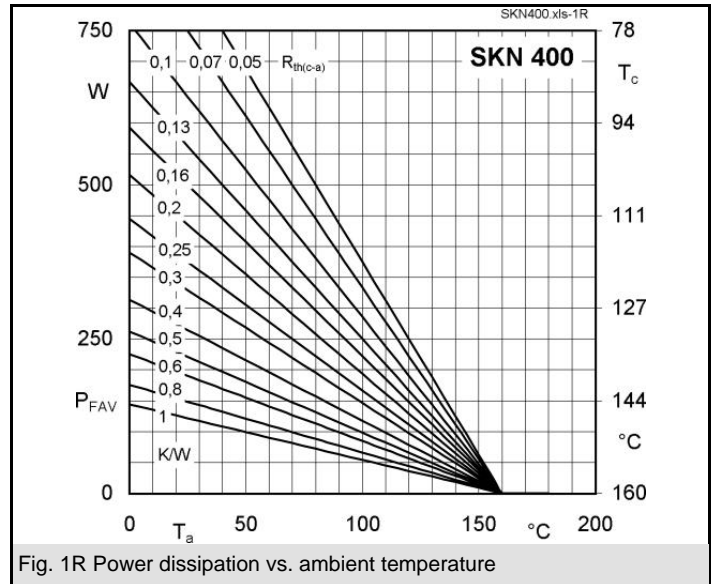
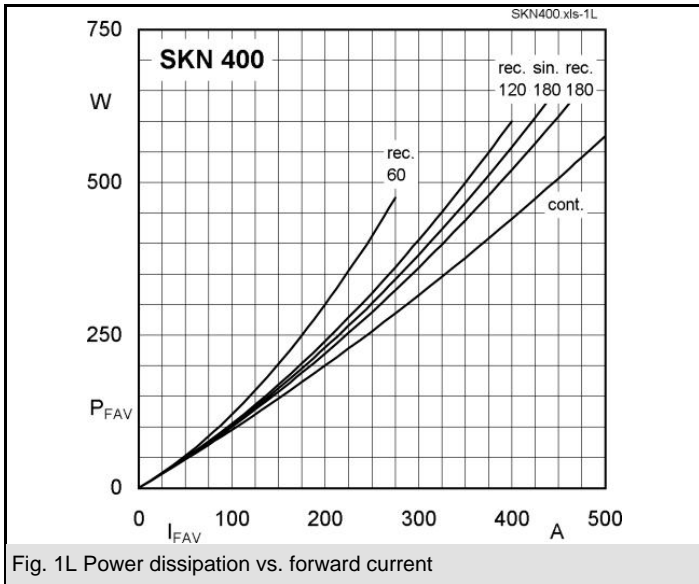
- High voltage rectifier diode, especially for traction applications
- Cooling via heatsinks
- Non-controllable and half-controllable rectifiers
- Free-wheeling diodes
- Recommended snubber network:  
RC: 1  $\mu$ F, 20  $\Omega$  ( $P_R = 2$  W),  
 $R_p = 25$  k $\Omega$  ( $P_R = 20$  W)

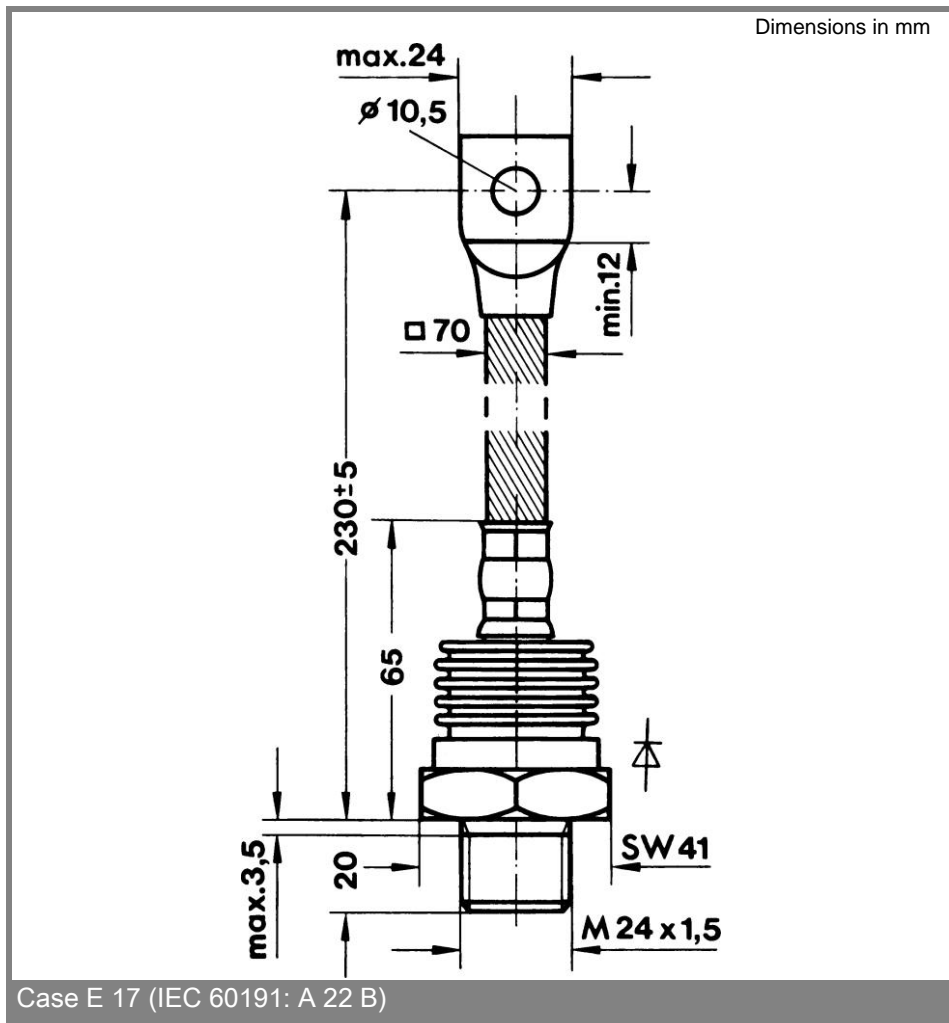
$V_{RSM}$ V	$V_{RRM}$ V	$I_{FRMS} = 700$ A (maximum value for continuous operation) $I_{FAV} = 400$ A (sin. 180; $T_c = 100$ °C)	
1800	1800	SKN 400/18	
2400	2400	SKN 400/24	
2700	2700	SKN 400/27	
3000	3000	SKN 400/30	

Symbol	Conditions	Values	Units
$I_{FAV}$	sin. 180; $T_c = 85$ (100) °C	445 (400)	A
$I_D$	K 0,55; $T_a = 45$ °C; B2 / B6	310 / 450	A
	K 0,55F; $T_a = 35$ °C; B2 / B6	700 / 1000	A
$I_{FSM}$	$T_{vj} = 25$ °C; 10 ms	9000	A
	$T_{vj} = 160$ °C; 10 ms	7500	A
$i^2t$	$T_{vj} = 25$ °C; 8,3 ... 10 ms	400000	A <sup>2</sup> s
	$T_{vj} = 160$ °C; 8,3 ... 10 ms	280000	A <sup>2</sup> s
$V_F$	$T_{vj} = 25$ °C; $I_F = 1200$ A	max. 1,45	V
$V_{(TO)}$	$T_{vj} = 160$ °C	max. 0,9	V
$r_T$	$T_{vj} = 160$ °C	max. 0,5	m $\Omega$
$I_{RD}$	$T_{vj} = 160$ °C; $V_{RD} = V_{RRM}$	max. 60	mA
$Q_{rr}$	$T_{vj} = 160$ °C; $- di_F/dt = 10$ A/ $\mu$ s	400	$\mu$ C
$R_{th(j-c)}$		0,11	K/W
$R_{th(c-s)}$		0,01	K/W
$T_{vj}$		- 40 ... + 160	°C
$T_{stg}$		- 55 ... + 160	°C
$V_{isol}$		-	V~
$M_s$	to heatsink	60	Nm
a		5 * 9,81	m/s <sup>2</sup>
m	approx.	500	g
Case		E 17	



**SKN**





This technical information specifies semiconductor devices but promises no characteristics. No warranty or guarantee expressed or implied is made regarding delivery, performance or suitability.