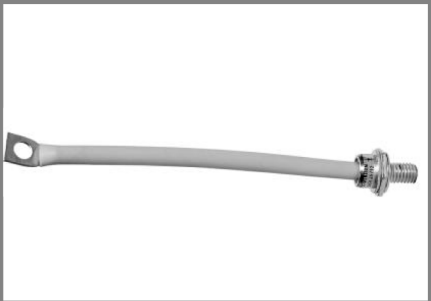




Stud Diode

Rectifier Diode

SKN 45
SKR 45

Features

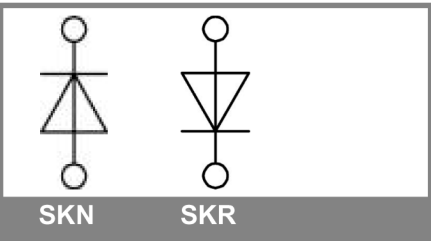
- Reverse voltages up to 1600 V
- Hermetic metal case with glass insulator
- Threaded stud ISO M8
- SKN: anode to stud, SKR: cathode to stud

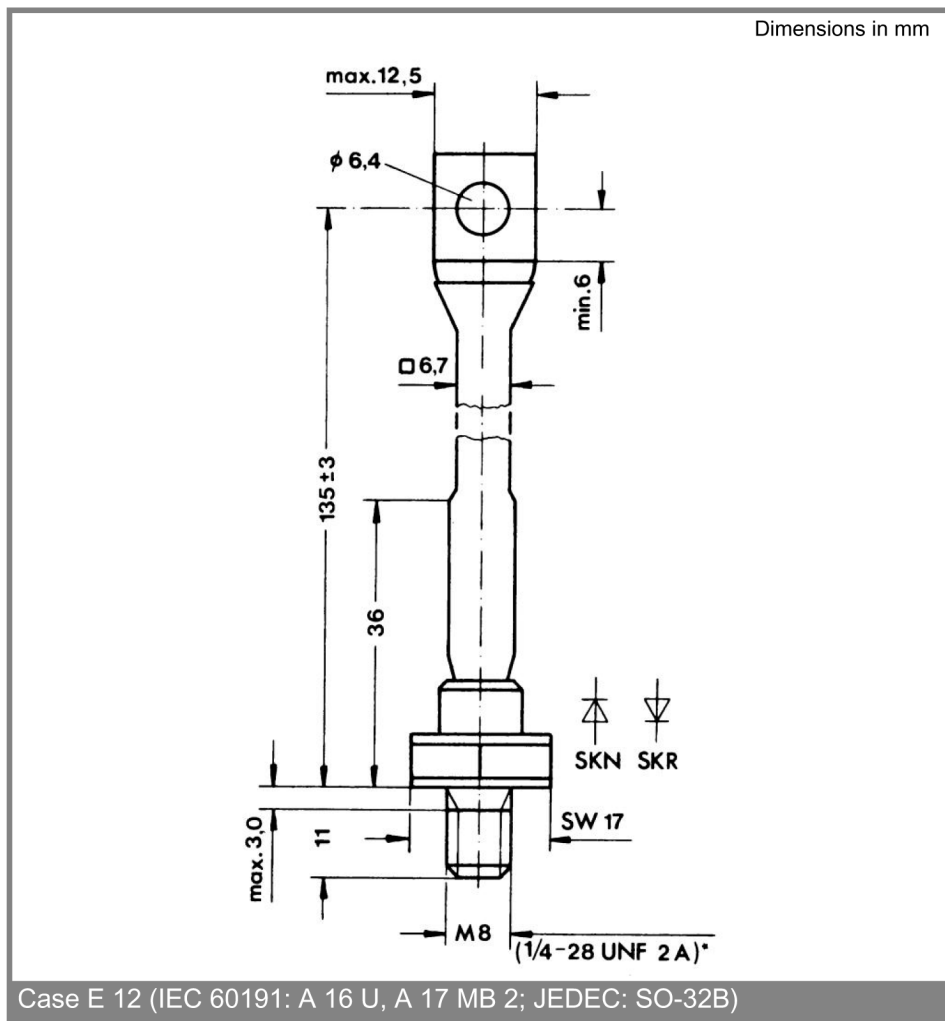
Typical Applications

- All-purpose mean power rectifier diodes
- Cooling via heatsinks
- Non-controllable and half-controllable rectifiers
- Free-wheeling diodes
- Recommended snubber network:
RC: 0,1 µF, 100 Ω (P_R = 1 W)
R_P = 80 kΩ (P_R = 6 W)

V _{RSM} V	V _{RRM} V	I _{FRMS} = 80 A (maximum value for continuous operation)		
		I _{FAV} = 45 A (sin. 180; T _c = 125 °C)		
400	400	SKN 45/04	SKR 45/04	
800	800	SKN 45/08	SKR 45/08	
1200	1200	SKN 45/12	SKR 45/12	
1400	1400	SKN 45/14	SKN 45/14	
1600	1600	SKN 45/16	SKR 45/16	

Symbol	Conditions	Values	Units
I _{FAV}	sin. 180; T _c = 100 °C	50	A
I _D	K 5; T _a = 45 °C; B2 / B6	40 / 57	A
	K 1,1; T _a = 45 °C; B2 / B6	86 / 120	A
I _{FSM}	T _{vj} = 25 °C; 10 ms	700	A
	T _{vj} = 180 °C; 10 ms	600	A
i²t	T _{vj} = 25 °C; 8,3 ... 10 ms	2500	A²s
	T _{vj} = 180 °C; 8,3 ... 10 ms	1800	A²s
V _F	T _{vj} = 25 °C; I _F = 150 A	max. 1,6	V
V _(TO)	T _{vj} = 180 °C	max. 0,85	V
r _T	T _{vj} = 180 °C	max. 5	mΩ
I _{RD}	T _{vj} = 180 °C; V _{RD} = V _{RRM}	max. 10	mA
Q _{rr}	T _{vj} = 160 °C; - di _F /dt = 10 A/µs	70	µC
R _{th(j-c)}		0,85	K/W
R _{th(c-s)}		0,25	K/W
T _{vj}		- 40 ... + 180	°C
T _{stg}		- 55 ... + 180	°C
V _{isol}		-	V~
M _s	to heatsink	4	Nm
a		5 * 9,81	m/s²
m	approx.	30	g
Case		E 12	





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