

SKN 163, SKR 163



Stud Diode

Rectifier Diode

SKN 163
SKR 163

Features

- Reverse voltages up to 1600 V
- Hermetic metal cases with glass insulator and epoxy resin reinforcement.
- Optional Silicone Sleeve
- Threaded stud 3/8" – 24 UNF
- **SKN**: anode to stud
- **SKR**: cathode to stud

Typical Applications *

- Rotating rectifiers for brushless generators
- All purpose mean power rectifier diodes
- Cooling via heatsinks
- Non-controllable and half-controllable rectifiers
- Free-wheeling diodes
- Recommended snubber network:
RC: 0,25 μ F, 50 Ω ($P_R = 2W$),
R_p: 50 K Ω ($P_R = 20 W$)

V_{RSM} V	V_{RRM} V	$I_{FRMS} = 260 A$ (maximum value for continuous operation) $I_{FAV} = 165 A$ (sin. 180; $T_c = 100^\circ C$)	
1200 1600	1200 1600	SKN 163/12 UNF SKN 163/16 UNF	SKR 163/12 UNF SKR 163/16 UNF

Symbol	Condition	Values	Units
I_{FAV}	sin. 180 ; $T_C = 100^\circ C$	165	A
	sin. 180 ; $T_C = 125^\circ C$	130	A
I_D	K1,1; $T_a = 45^\circ C$; B2/B6	160 / 225	A
	K1,1F; $T_a = 35^\circ C$; B2/B6	290 / 405	A
I_{FSM}	$T_{vj} = 25^\circ C$; 10 ms	2500	A
	$T_{vj} = 180^\circ C$; 10 ms	2000	A
i^2t	$T_{vj} = 25^\circ C$; 8,3...10 ms	31000	A ² s
	$T_{vj} = 180^\circ C$; 8,3...10 ms	20000	A ² s
V_F	$T_{vj} = 25^\circ C$, $I_F = 500 A$	Max. 1,5	V
$V_{(TO)}$	$T_{vj} = 180^\circ C$	Max 0,85	V
r_T	$T_{vj} = 180^\circ C$	Max 1,3	m Ω
I_{RD}	$T_{vj} = 180^\circ C$; $V_R = V_{RRM}$	Max. 22	mA
Q_{rr}	$T_{vj} = 160^\circ C$, $-di_F/dt = 10 A/\mu s$	120	μC
$R_{th(i-c)}$		0,35	K/W
$R_{th(c-s)}$		0,08	K/W
T_{vj}		-40...+180	$^\circ C$
T_{stq}		-55...+180	$^\circ C$
V_{isol}		-	V~
M_s	to heatsink (SI units)	8	Nm
	to heatsink (US units)	71	lb.in.
m	approx.	105	g
Case		Special	

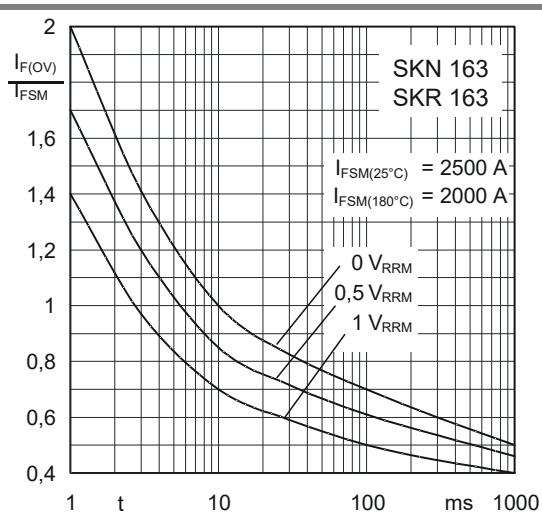
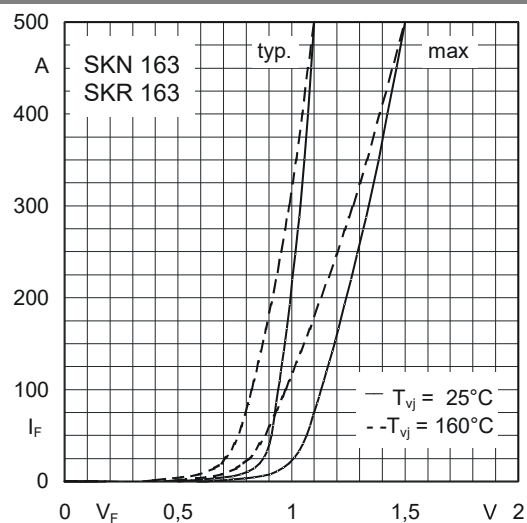
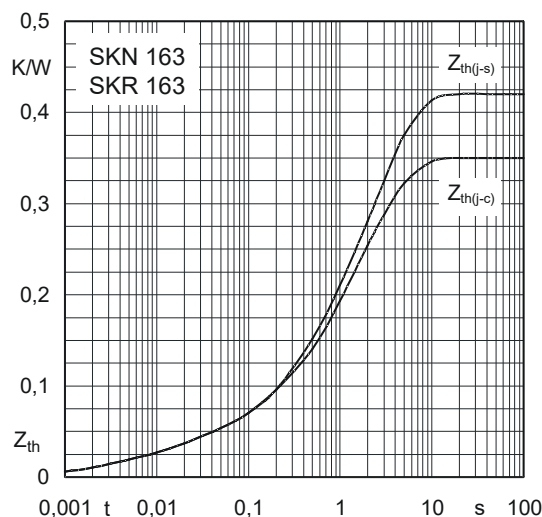
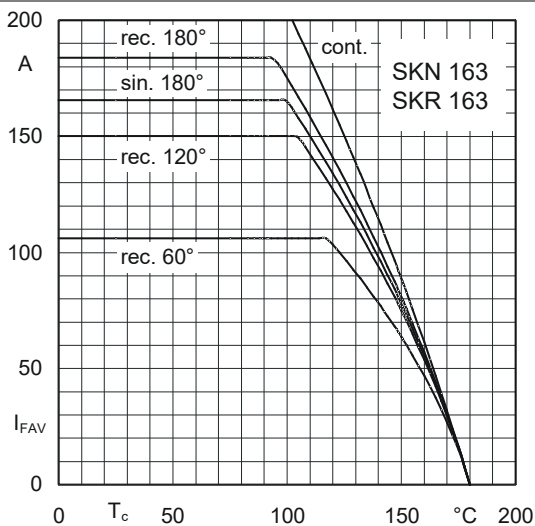
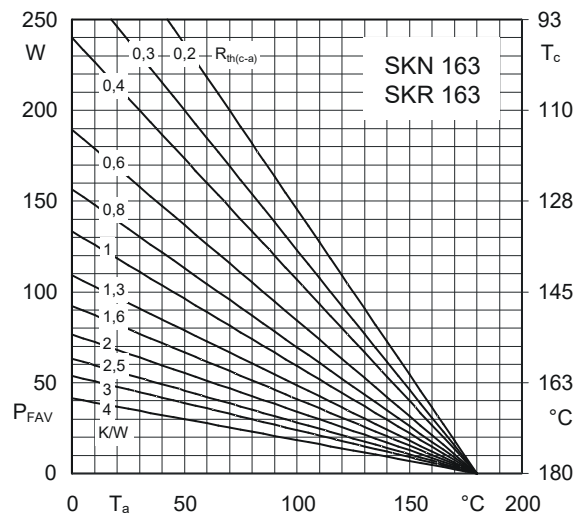
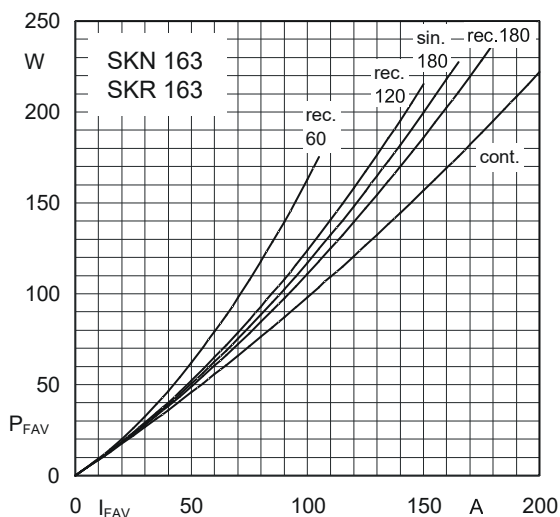


SKN



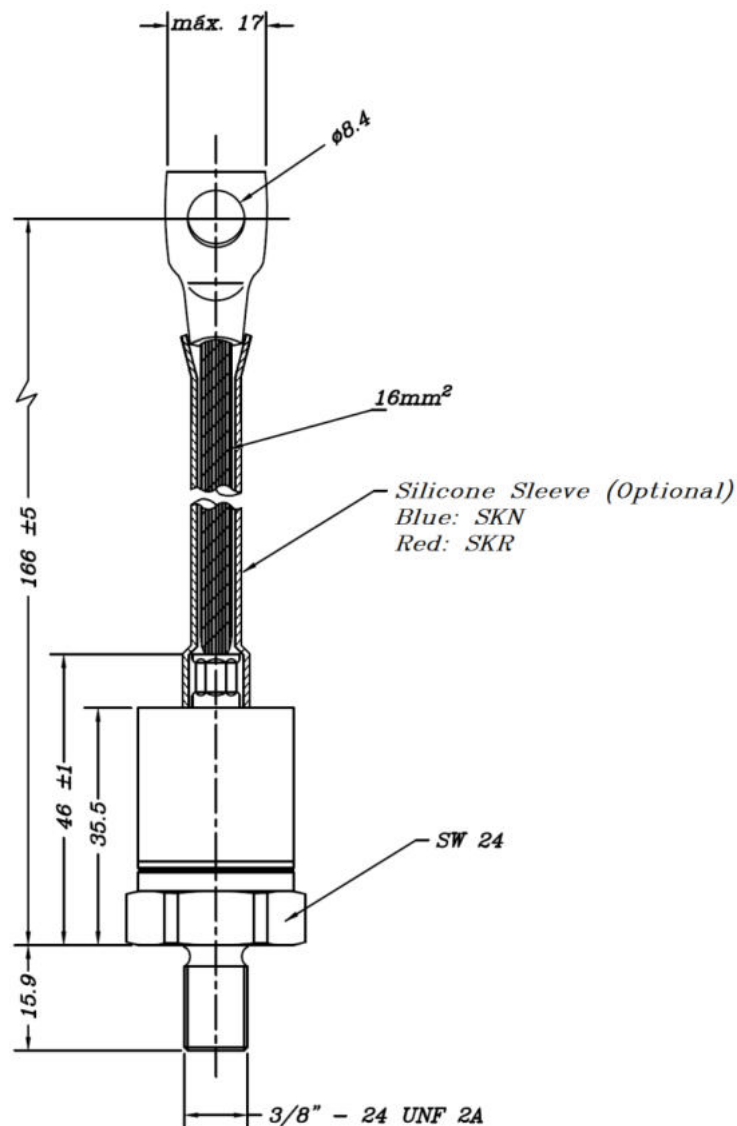
SKR

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Dimensions in mm



Case : Special Type – 3/8" – 24 UNF 2A

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