SKN 135F



Stud Diode

Fast Recovery Rectifier Diode

SKN 135F

SKR 135F

Features

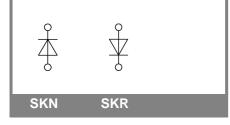
- Small recovered charge
- Soft recovery
- Hermetic metal case with glass insulator
- Threaded stud M12
- SKN: anode to stud; SKR: cathode to stud

Typical Applications

- Inverse diode for GTO and asymmetric thyristor
- Inverters and choppers
- A.C. motor control
- Uniterruptible power supplies
 (UPS)

V _{RSM}	V _{RRM}	I _{FRMS} = 260 A (maximum value for continuous operation)		
V	V	I _{FAV} = 135 A (sin. 180; 1000 Hz; T _c = 100 °C)		
800	800	SKN 135F08	SKR 135F08	
1000	1000	SKN 135F10	SKR 135F10	
1200	1200	SKN 135F12	SKR 135F12	

Symbol	Conditions	Values	Units
I _{FAV}	sin. 180; T _c = 85 (100) °C	160 (135)	А
I _{FAV}	K1,1F; T _a = 35 °C; sin. 180; 1000 Hz	110	А
I _{FSM}	T _{vi} = 25 °C; 10 ms	2500	A
	T _{vi} = 150 °C; 10 ms	2100	А
i²t	T _{vj} = 25 °C; 8,3 10 ms	31000	A²s
	T _{vj} = 150 °C; 8,3 10 ms	22000	A²s
V _F	T _{vi} = 25 °C; I _F = 300 A	max. 1,95	V
V _(TO)	T _{vi} = 150 °C	max. 1,1	V
r _T	T _{vj} = 150 °C	max. 2,3	mΩ
I _{RD}	$T_{vj} = 25 \text{ °C}; V_{RD} = V_{RRM}$	max. 1	mA
I _{RD}	T _{vj} = 150 °C; V _{RD} = V _{RRM}	max. 100	mA
Q _{rr}	T _{vi} = 150 °C, I _F = 100 A,	50	μC
I _{RM}	-di/dt = 100 A/μs, V _R = 400 V	53	A
t _{rr}		1900	ns
E _{rr}		-	mJ
R _{th(j-c)}		0,2	K/W
R _{th(c-s)}		0,08	K/W
T _{vi}		- 40 + 150	°C
T _{stg}		- 55 + 150	°C
V _{isol}		-	V~
Ms	to heatsink	10	Nm
а		5 * 9,81	m/s²
m	approx.	100	g
Case	135F	E 14	





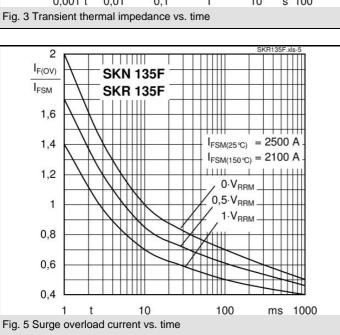
1,5

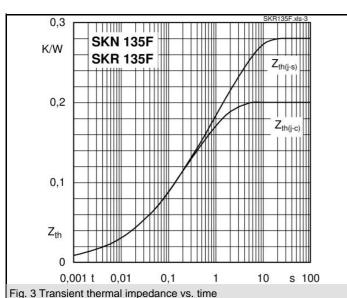
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05-04-2004 SCT





200

μC

160

140

120

100

80

60

40 Qrr

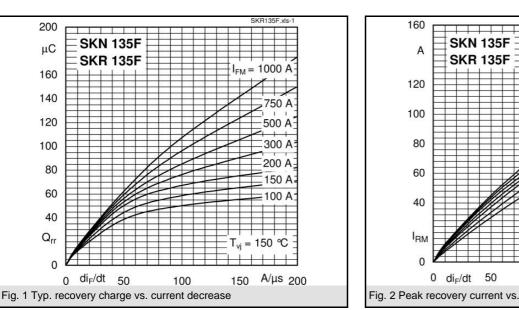
0

di_F/dt 0

50

SKN 135F

SKR 135F



200

150

100

 I_F

0

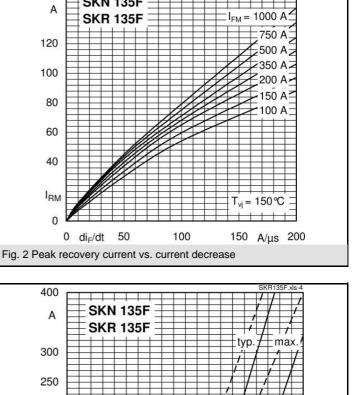
0 V_{F}

Fig. 4 Forward characteristics

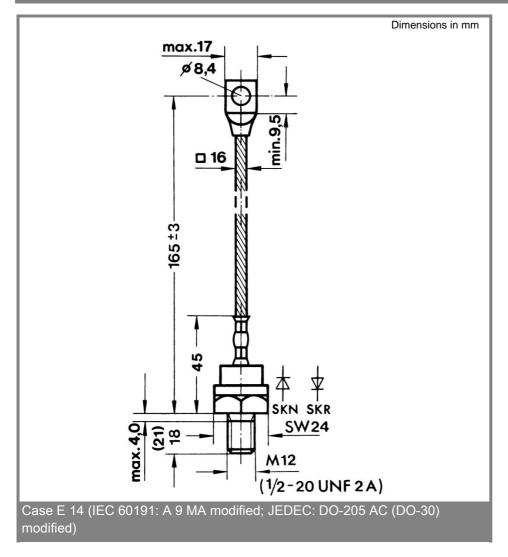
T_{vi} = 25℃

= 150 ℃

0,5



SKN 135F



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