SKN 140F



Stud Diode

Fast Recovery Rectifier Diode

SKN 140F SKR 140F

Features

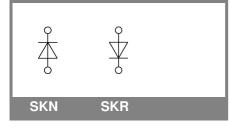
- Small recovered charge
- Soft recovery
- Hermetic metal case with glass insulator
- Threaded stud M12
- SKN: anode to stud; SKR: cathode to stud

Typical Applications*

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

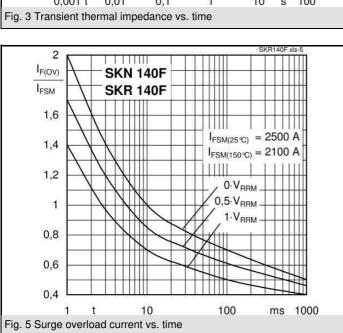
V _{RSM}	V _{RRM}	I _{FRMS} = 260 A (maximum value for continuous operation)		
V	V	I _{FAV} = 140 A (sin. 180; 1000 Hz; T _c = 100 °C)		
1200	1200	SKN 140F12	SKR 140F12	
1400	1400	SKN 140F14	SKR 140F14	
1500	1500	SKN 140F15	SKR 140F15	
1700	1700	SKN 140F17	SKR 140F17	

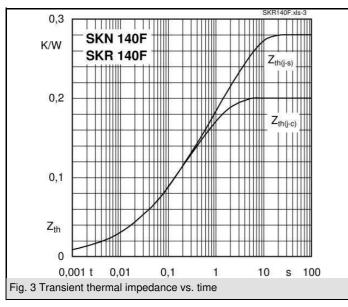
Symbol	Conditions	Values	Units
I _{FAV}	sin. 180; T _c = 85 (100) °C	168 (140)	А
I _{FAV}	K1,1F; T _a = 35 °C; sin. 180; 1000 Hz	114	А
I _{FSM}	T _{vi} = 25 °C; 10 ms	2500	Α
	T _{vi} = 150 °C; 10 ms	2100	А
i²t	T _{vi} = 25 °C; 8,3 10 ms	31000	A²s
	T _{vj} = 150 °C; 8,3 10 ms	22000	A²s
V _F	T _{vi} = 25 °C; I _F = 300 A	max. 1,8	V
V _(TO)	T _{vi} = 150 °C	max. 1,1	V
r _T	T _{vi} = 150 °C	max. 2	mΩ
I _{RD}	$T_{vj} = 25 \text{ °C}; V_{RD} = V_{RRM}$	max. 1	mA
I _{RD}	$T_{vj} = 150 \text{ °C}, V_{RD} = V_{RRM}$	max. 100	mA
Q _{rr}	T _{vi} = 150 °C, I _F = 100 A,	90	μC
I _{RM}	-di/dt = 100 A/µs, V _R = 400 V	90	А
t _{rr}		2000	ns
E _{rr}		-	mJ
R _{th(j-c)}		0,2	K/W
R _{th(c-s)}		0,08	K/W
T _{vj}		- 40 + 150	°C
T _{stg}		- 55 + 150	°C
V _{isol}		-	V~
Ms	to heatsink	10	Nm
a		5 * 9,81	m/s²
m	approx.	100	g
Case		E 14	

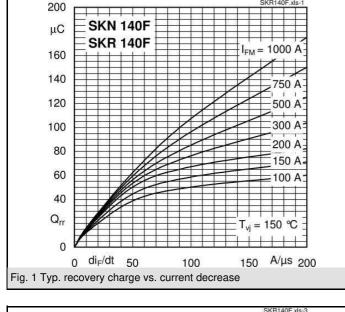


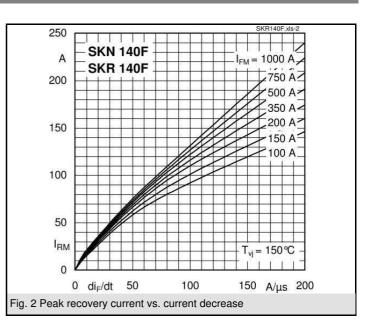


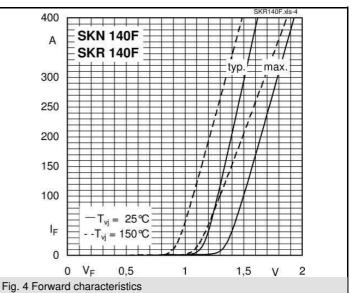
05-04-2004 SCT



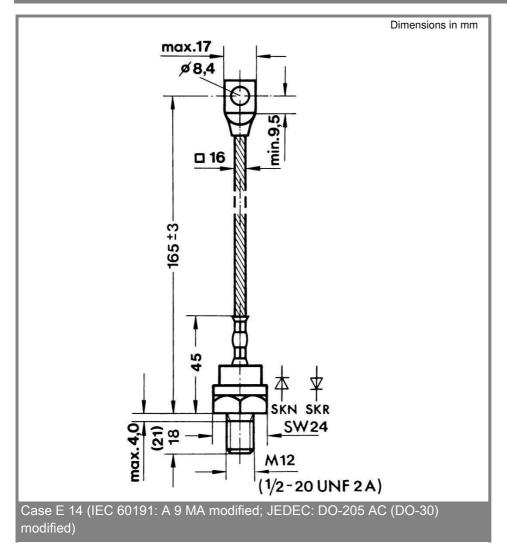








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* The specifications of our components may not be considered as an assurance of component characteristics. Components have to be tested for the respective application. Adjustments may be necessary. The use of SEMIKRON products in life support appliances and systems is subject to prior specification and written approval by SEMIKRON. We therefore strongly recommend prior consultation of our personal.