

SKN 141F



Stud Diode

Fast Recovery Rectifier Diode

SKN 141F  
SKR 141F

Features

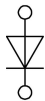
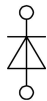
- Small recovered charge
- Soft recovery
- Hermetic metal case with glass insulator
- Threaded stud M12
- SKN: anode to stud;  
SKR: cathode to stud

Typical Applications

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

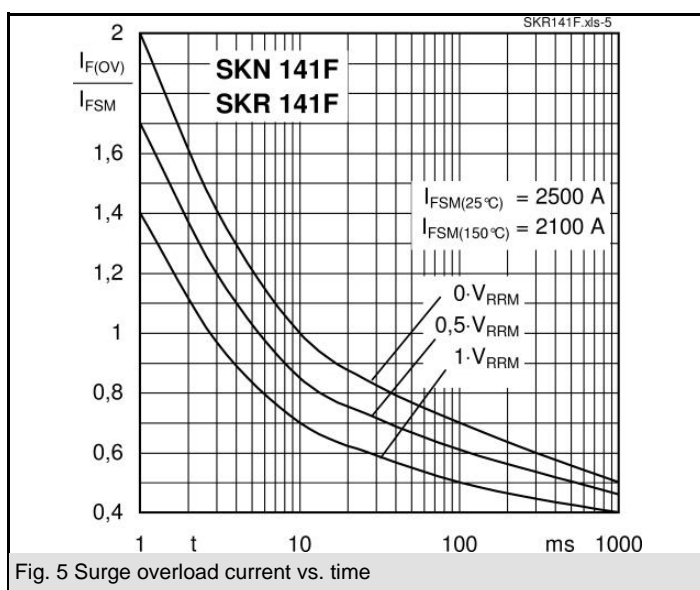
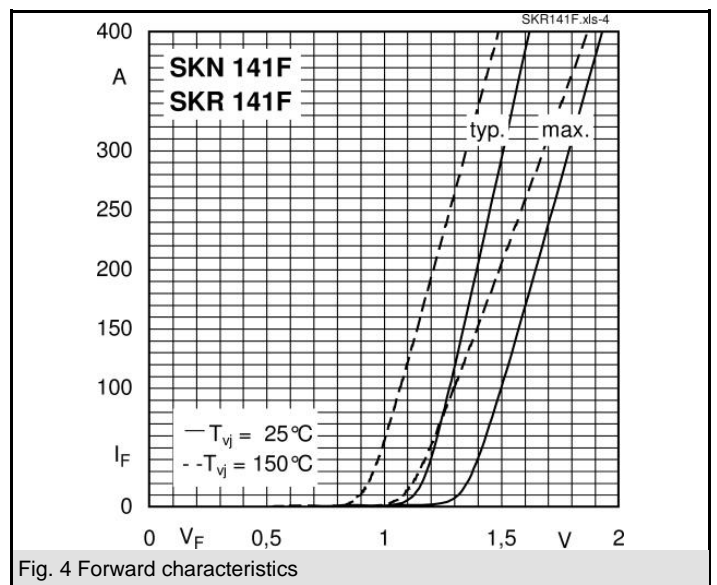
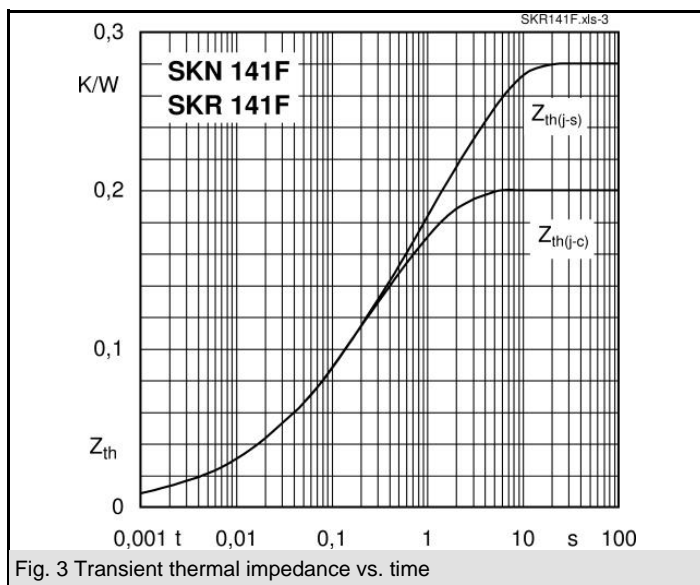
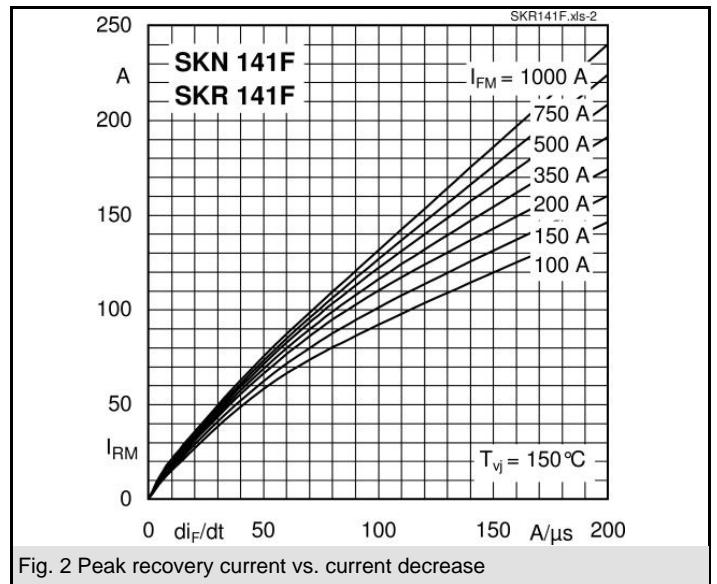
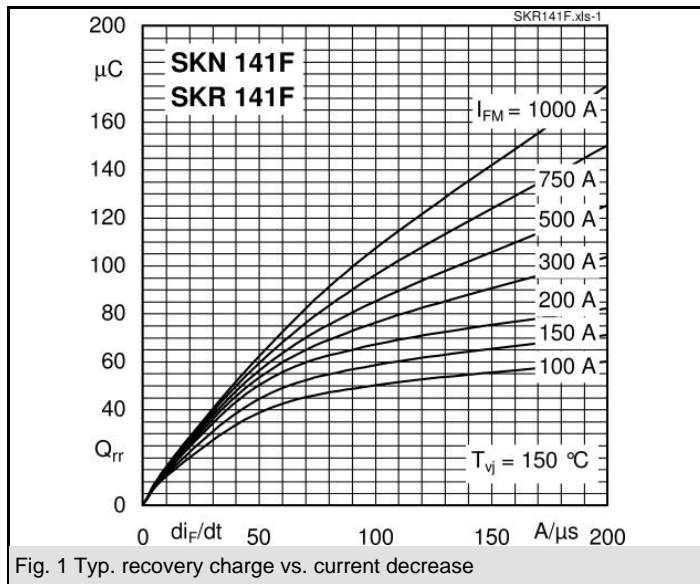
$V_{RSM}$ V	$V_{RRM}$ V	$I_{FRMS} = 260\text{ A}$ (maximum value for continuous operation) $I_{FAV} = 140\text{ A}$ (sin. 180; 1000 Hz; $T_c = 100\text{ }^{\circ}\text{C}$ )		
1200	1200	SKN 141F12	SKR 141F12	
1400	1400	SKN 141F14	SKR 141F14	
1500	1500	SKN 141F15	SKR 141F15	
1700	1700	SKN 141F17	SKR 141F17	

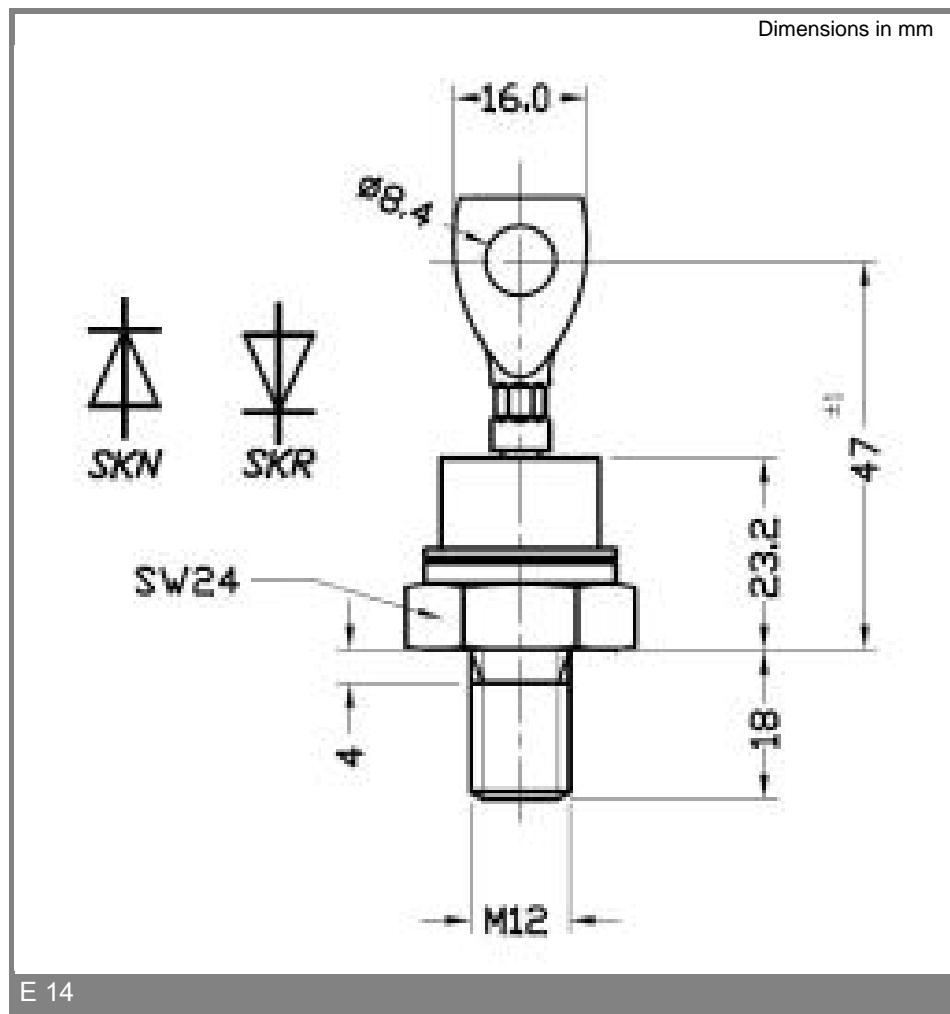
Symbol	Conditions	Values	Units
$I_{FAV}$	sin. 180; $T_c = 85\text{ (100) }^{\circ}\text{C}$	168 (140)	A
$I_{FAV}$	K1,1F; $T_a = 35\text{ }^{\circ}\text{C}$ ; sin. 180; 1000 Hz	114	A
$I_{FSM}$	$T_{vj} = 25\text{ }^{\circ}\text{C}$ ; 10 ms	2500	A
	$T_{vj} = 150\text{ }^{\circ}\text{C}$ ; 10 ms	2100	A
$i^2t$	$T_{vj} = 25\text{ }^{\circ}\text{C}$ ; 8,3 ... 10 ms	31000	A <sup>2</sup> s
	$T_{vj} = 150\text{ }^{\circ}\text{C}$ ; 8,3 ... 10 ms	22000	A <sup>2</sup> s
$V_F$	$T_{vj} = 25\text{ }^{\circ}\text{C}$ ; $I_F = 300\text{ A}$	max. 1,8	V
$V_{(TO)}$	$T_{vj} = 150\text{ }^{\circ}\text{C}$	max. 1,1	V
$r_T$	$T_{vj} = 150\text{ }^{\circ}\text{C}$	max. 2	mΩ
$I_{RD}$	$T_{vj} = 25\text{ }^{\circ}\text{C}$ ; $V_{RD} = V_{RRM}$	max. 1	mA
$I_{RD}$	$T_{vj} = 150\text{ }^{\circ}\text{C}$ ; $V_{RD} = V_{RRM}$	max. 100	mA
$Q_{rr}$	$T_{vj} = 150\text{ }^{\circ}\text{C}$ ; $I_F = 100\text{ A}$ ,	90	μC
$I_{RM}$	$-di/dt = 100\text{ A/}\mu\text{s}$ ; $V_R = 400\text{ V}$	90	A
$t_{rr}$		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~
$M_s$	to heatsink	10	Nm
$a$		5 * 9,81	m/s <sup>2</sup>
$m$	approx.	100	g
Case		E 31	



SKN

SKR





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