



## Stud Diode

## Fast Recovery Rectifier Diode

**SKN 136F**

**SKR 136F**

### 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	$I_{FRMS} = 260$ A (maximum value for continuous operation) $I_{FAV} = 135$ A (sin. 180; 1000 Hz; $T_c = 100$ °C)		
800	800	SKN 136F08	SKR 136F08	
1000	1000	SKN 136F10	SKR 136F10	
1200	1200	SKN 136F12	SKR 136F12	

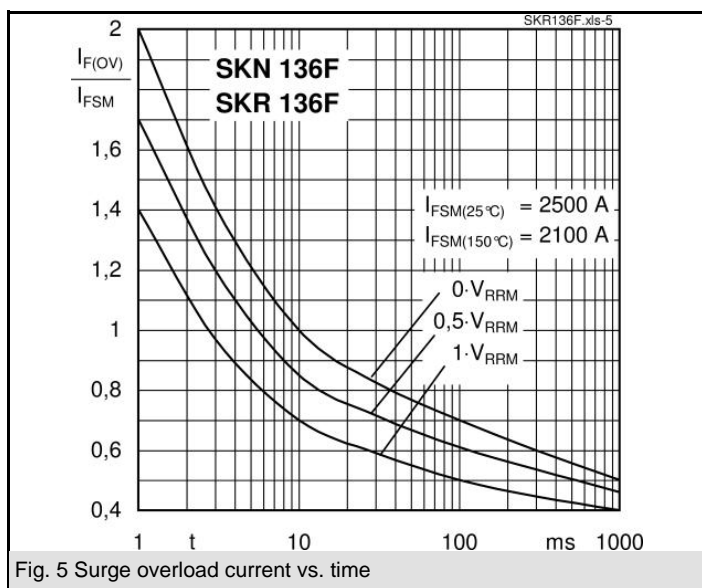
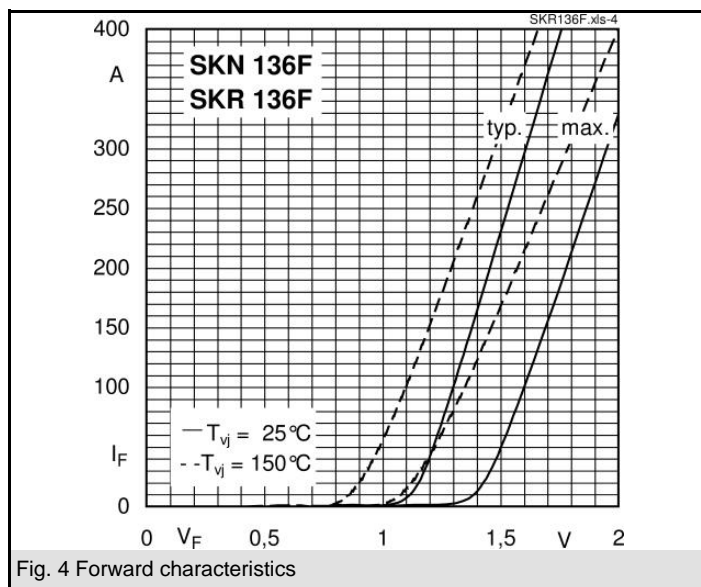
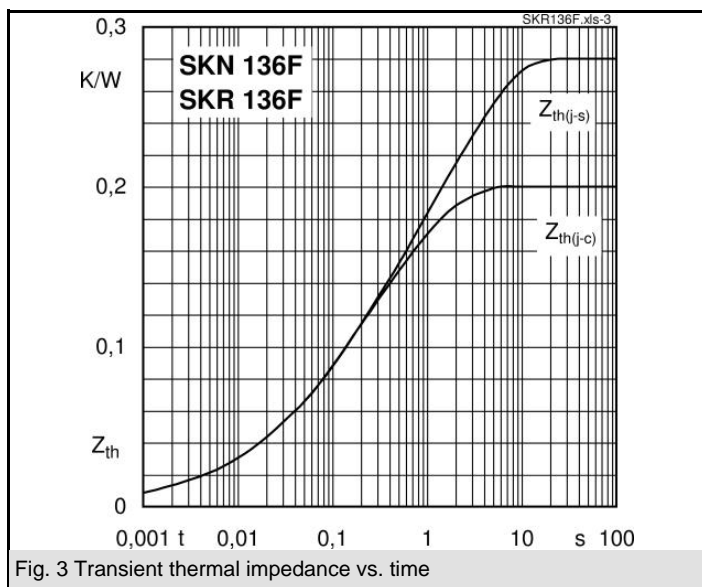
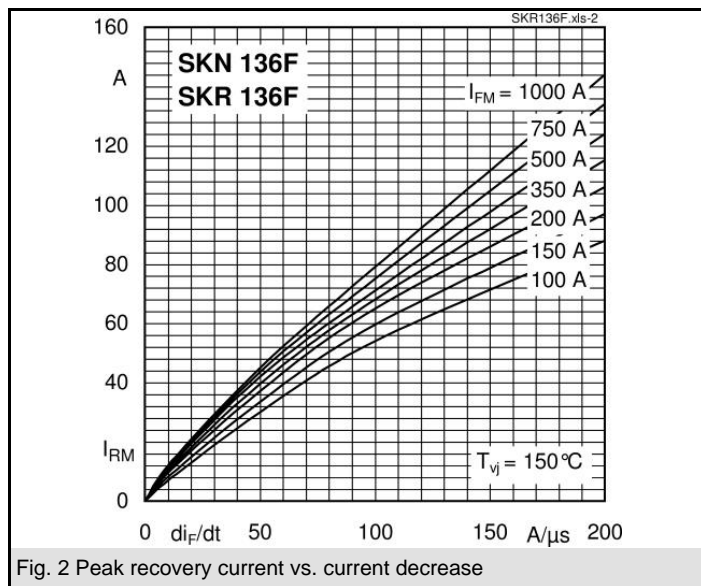
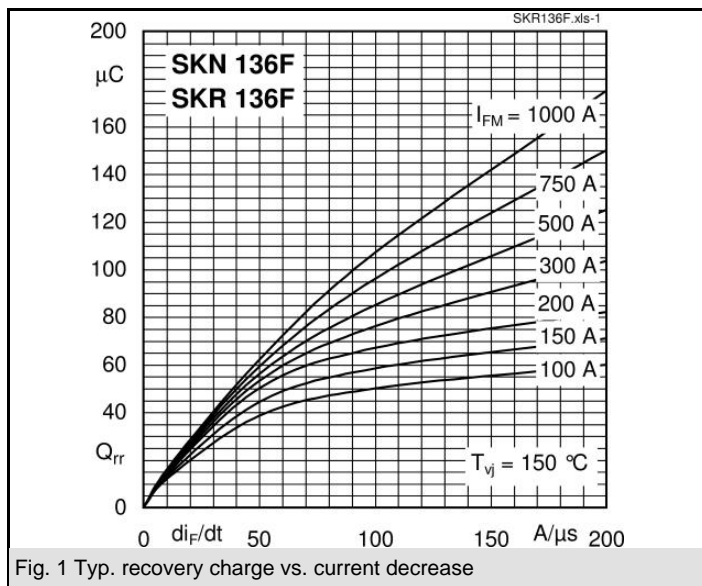
Symbol	Conditions	Values	Units
$I_{FAV}$	sin. 180; $T_c = 85$ (100) °C	160 (135)	A
$I_{FAV}$	K1,1F; $T_a = 35$ °C; sin. 180; 1000 Hz	110	A
$I_{FSM}$	$T_{vj} = 25$ °C; 10 ms	2500	A
	$T_{vj} = 150$ °C; 10 ms	2100	A
$i^2t$	$T_{vj} = 25$ °C; 8,3 ... 10 ms	31000	A²s
	$T_{vj} = 150$ °C; 8,3 ... 10 ms	22000	A²s
$V_F$	$T_{vj} = 25$ °C; $I_F = 300$ A	max. 1,95	V
$V_{(TO)}$	$T_{vj} = 150$ °C	max. 1,1	V
$r_T$	$T_{vj} = 150$ °C	max. 2,3	mΩ
$I_{RD}$	$T_{vj} = 25$ °C; $V_{RD} = V_{RRM}$	max. 1	mA
$I_{RD}$	$T_{vj} = 150$ °C; $V_{RD} = V_{RRM}$	max. 100	mA
$Q_{rr}$	$T_{vj} = 150$ °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
$T_{vj}$		- 40 ... + 150	°C
$T_{stg}$		- 55 ... + 150	°C
$V_{isol}$		-	V~
$M_s$	to heatsink	10	Nm
$a$		5 * 9,81	m/s²
$m$	approx.	75	g
Case		E 31	

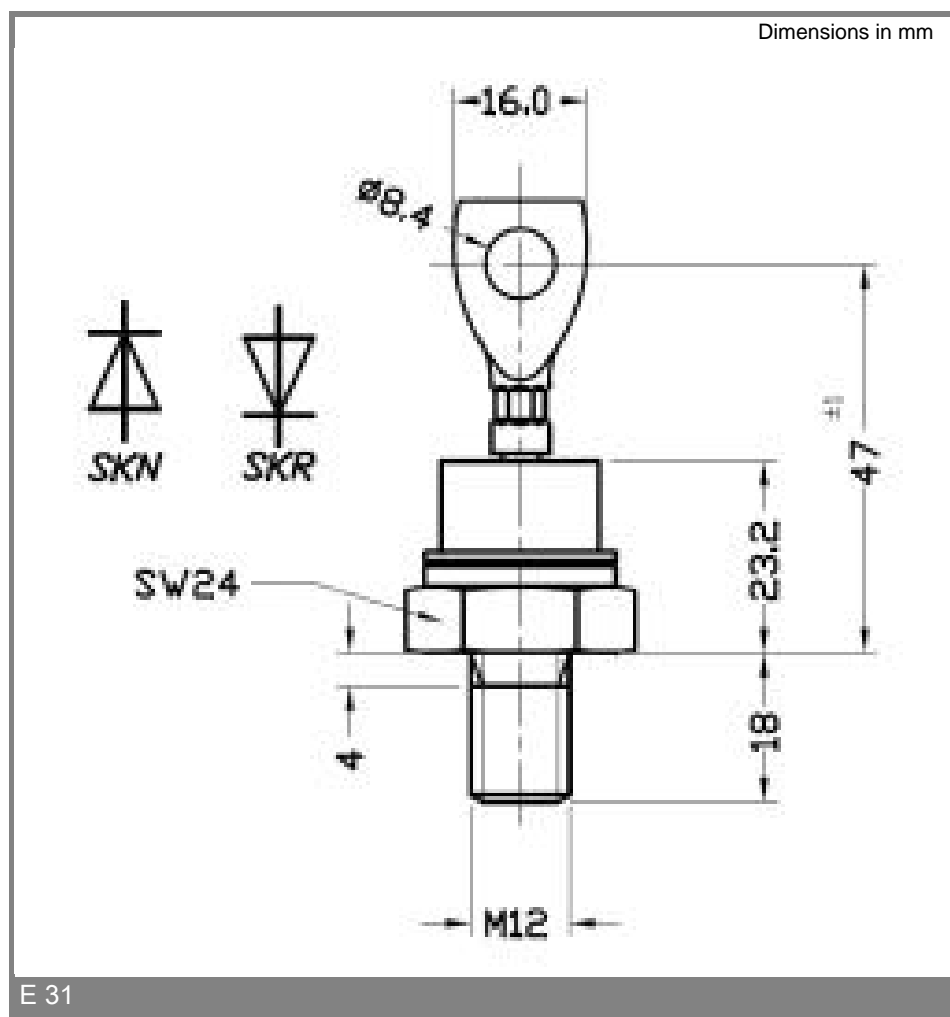


SKN



SKR





\* 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.