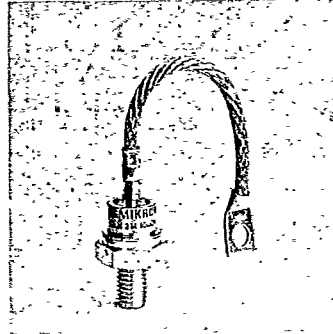


T-03-21

V <sub>RSM</sub> V <sub>RRM</sub>	I <sub>FRMS</sub> (maximum values for continuous operation) 190 A	
	I <sub>FAV</sub> (sin. 180; T <sub>case</sub> = 85 °C) 120 A	
	t <sub>rr</sub> = 2 μs	
V		
400	<b>SKN 2 M 100/04</b>	<b>SKR 2 M 100/04</b>
600	<b>SKN 2 M 100/06</b>	<b>SKR 2 M 100/06</b>
800	<b>SKN 2 M 100/08</b>	<b>SKR 2 M 100/08</b>
1000	<b>SKN 2 M 100/10</b>	<b>SKR 2 M 100/10</b>
1200	<b>SKN 2 M 100/12</b>	<b>SKR 2 M 100/12</b>
1400	<b>SKN 2 M 100/14</b>	<b>SKR 2 M 100/14</b>

**Fast Recovery Rectifier Diodes**

**SKN 2 M 100**  
**SKR 2 M 100**



Symbol	Conditions	SKN 2 M 100 SKR 2 M.100	Units	
I <sub>FAV</sub>	sin. 180; T <sub>case</sub> = 85 °C; f = 500 Hz	120	A	
	T <sub>case</sub> = 100 °C; f = 500 Hz	100	A	
	sin.180/ rec.120	T <sub>amb</sub> = 45 °C; K1,1	53/51	A
		P 1/200	90/86	A
	T <sub>amb</sub> = 35 °C; P 1/120 F	115/110	A	
I <sub>FSM</sub>	T <sub>vj</sub> = 25 °C	1800	A	
	T <sub>vj</sub> = 150 °C	1500	A	
i <sup>2</sup> t	T <sub>vj</sub> = 25 °C	16 000	A <sup>2</sup> s	
	T <sub>vj</sub> = 150 °C	11 000	A <sup>2</sup> s	
Q <sub>rr</sub>	- $\frac{di_F}{dt} = 10 \frac{A}{\mu s}$ ; T <sub>vj</sub> = 150 °C	typ. 50	μC	
I <sub>R</sub>	T <sub>vj</sub> = 25 °C; V <sub>R</sub> = V <sub>RRM</sub>	1	mA	
	T <sub>vj</sub> = 150 °C; V <sub>R</sub> = V <sub>RRM</sub>	24	mA	
t <sub>rr</sub>	T <sub>vj</sub> = 25 °C } I <sub>F</sub> = I <sub>R</sub> = 1 A T <sub>vj</sub> = 150 °C }	max. 2	μs	
		typ. 4	μs	
V <sub>F</sub>	T <sub>vj</sub> = 25 °C; I <sub>F</sub> = 300 A	max. 1,65	V	
V <sub>(TO)</sub>	T <sub>vj</sub> = 150 °C	1,0	V	
r <sub>T</sub>	T <sub>vj</sub> = 150 °C	2	mΩ	
R <sub>thjc</sub>		0,35	°C/W	
R <sub>thch</sub>		0,08	°C/W	
T <sub>vj</sub>		-40 ... + 150	°C	
T <sub>stg</sub>		-55 ... + 150	°C	
M	SI units	10	Nm	
	US units	90	lb.in.	
a		5·9,81	m/s <sup>2</sup>	
w	approx.	100	g	
Case		E13		

**Features**

- Small recovered charge
- Soft recovery
- Up to 1400 V reverse voltage
- Hermetic metal case with glass insulator
- Threaded stud M12 (USA and Canada also 3/8-24 UNF)
- SKN: anode to stud; SKR: cathode to stud

**Typical Applications**

- Inverse diodes for GTO and asymmetric thyristors
- Inverters and choppers
- A. C. motor control
- Uninterruptible power supplies

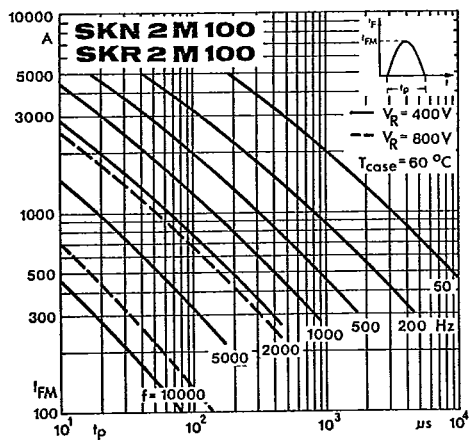


Fig. 1 a Rated sinusoidal peak forward current

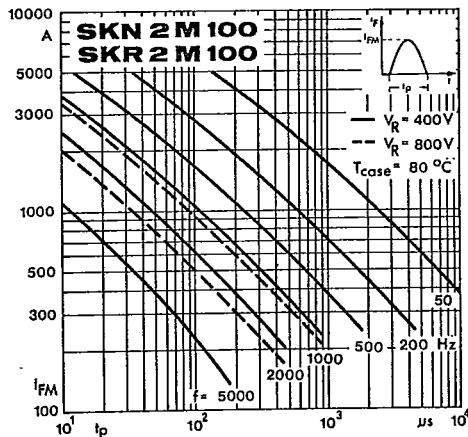


Fig. 1 b Rated sinusoidal peak forward current

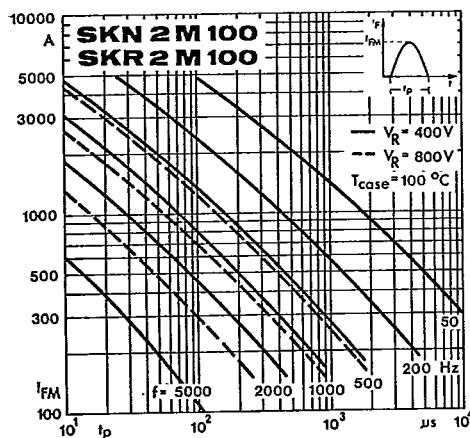


Fig. 1 c Rated sinusoidal peak forward current

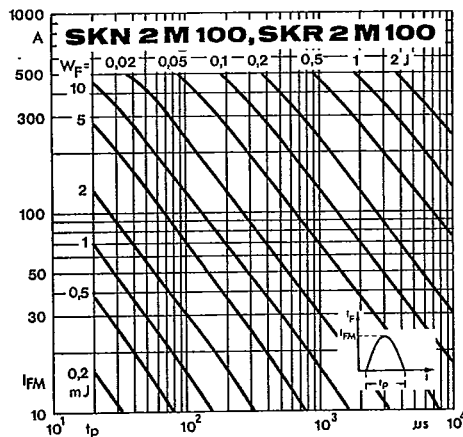


Fig. 2 Forward energy dissipation, sinusoidal

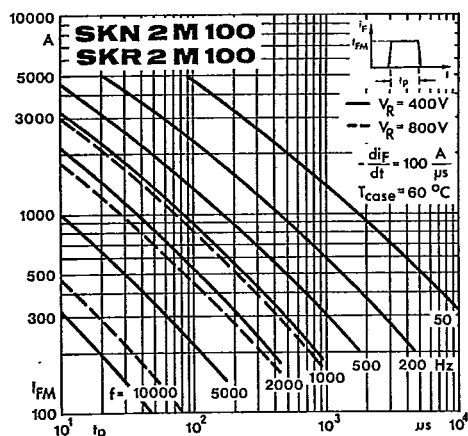


Fig. 3 a Rated rectangular peak forward current

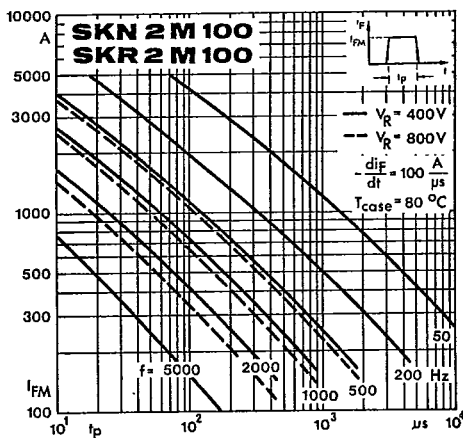


Fig. 3 b Rated rectangular peak forward current

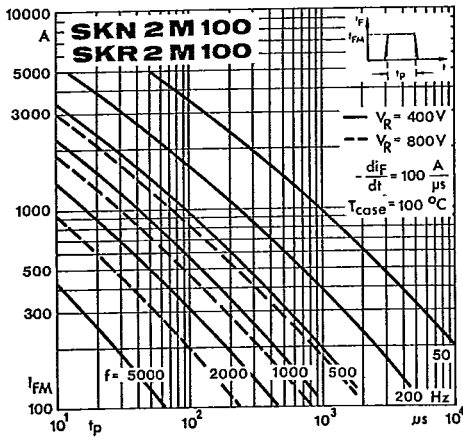


Fig. 3 c Rated rectangular peak forward current

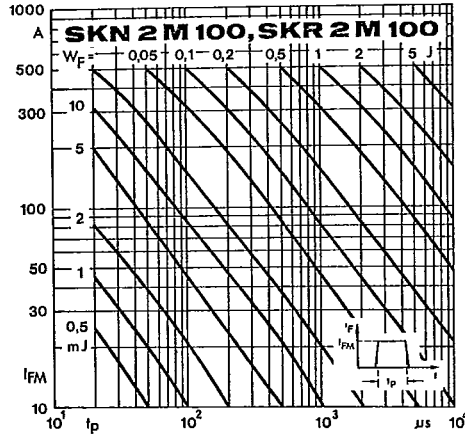


Fig. 4 Forward energy dissipation, rectangular

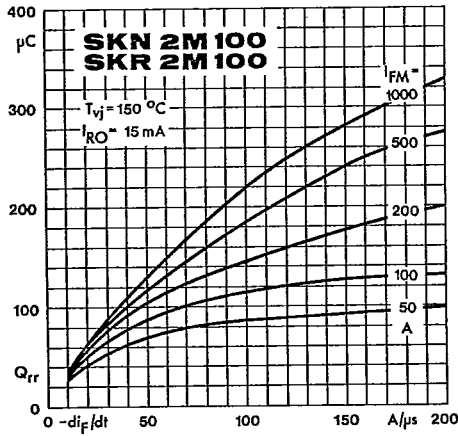


Fig. 5 Recovered charge

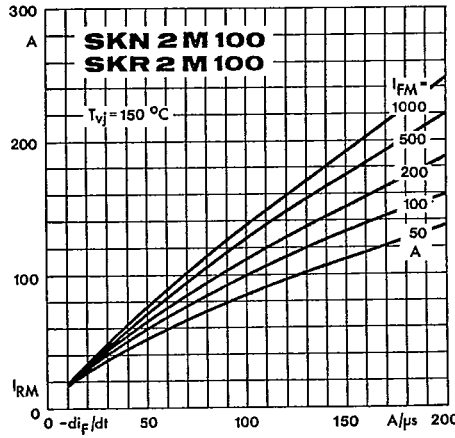


Fig. 6 Peak reverse recovery current

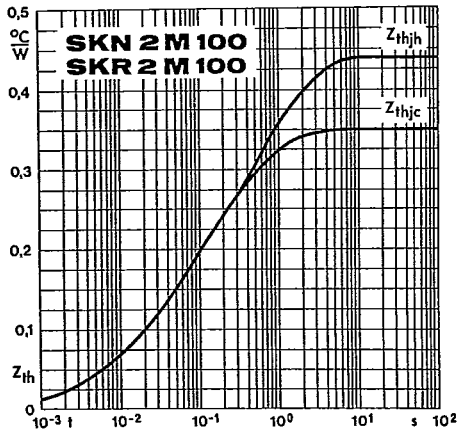


Fig. 7 Transient thermal impedance

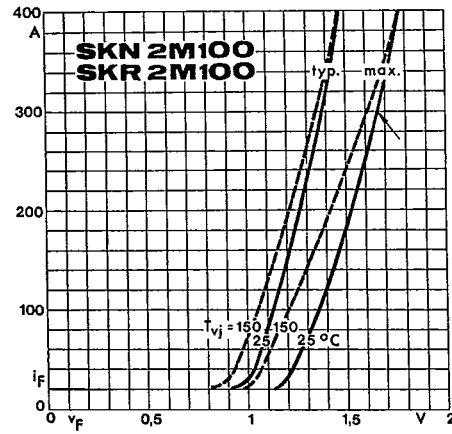


Fig. 8 Forward characteristics

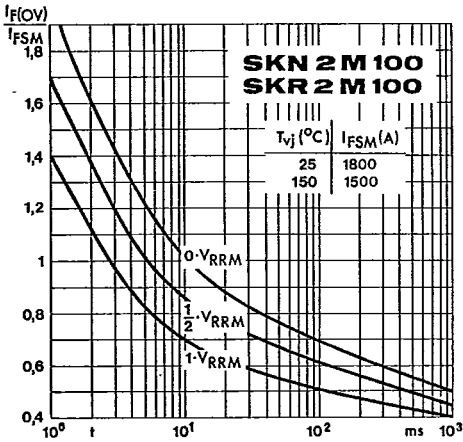
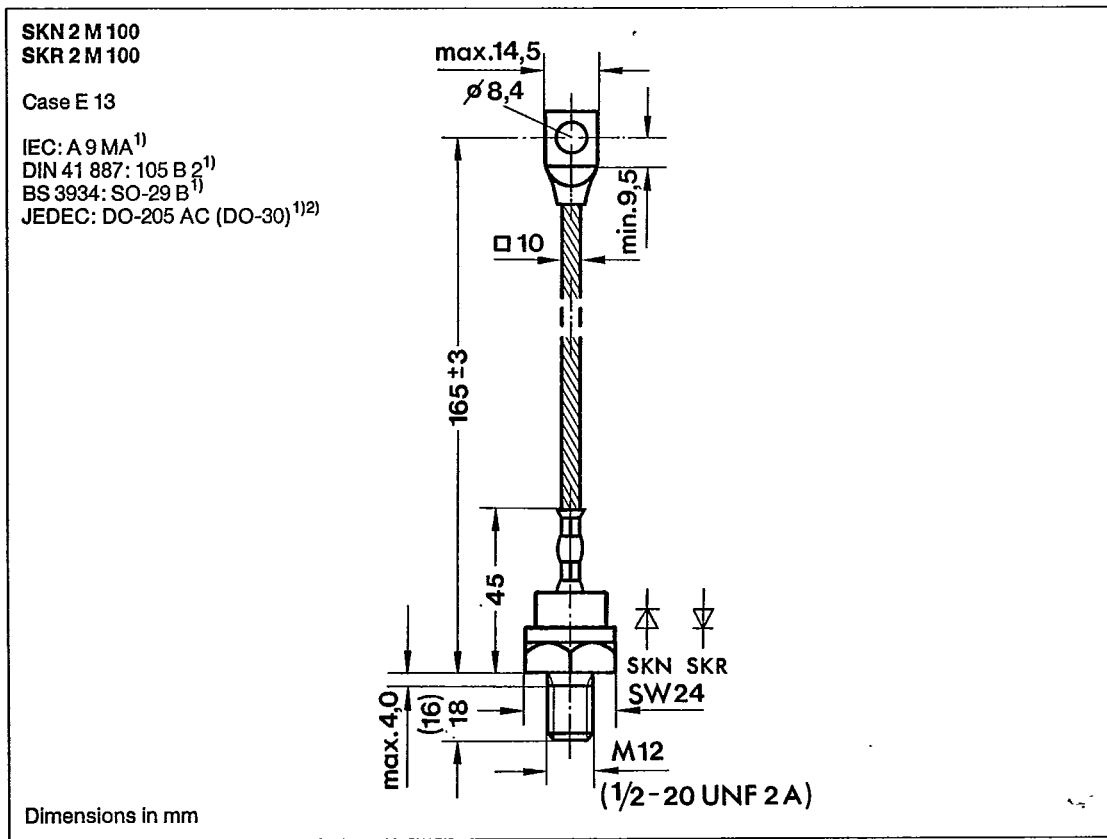


Fig. 9 Rated surge overload current



<sup>1)</sup> modified  
<sup>2)</sup> In the USA and Canada these types are available with the original DO-205 AA (DO-8) dimensions with thread 3/8-24.