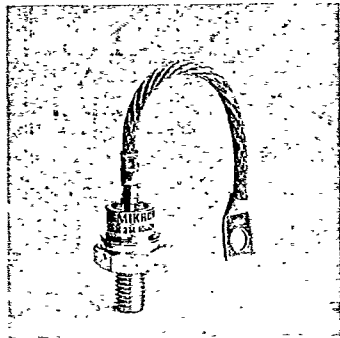


T-03-21

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

Fast Recovery Rectifier Diodes

SKN 2 M 100
SKR 2 M 100



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

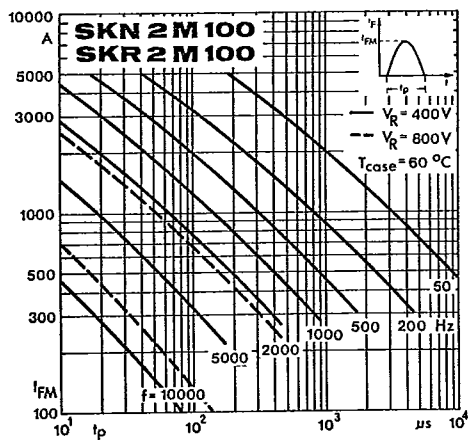


Fig. 1 a Rated sinusoidal peak forward current

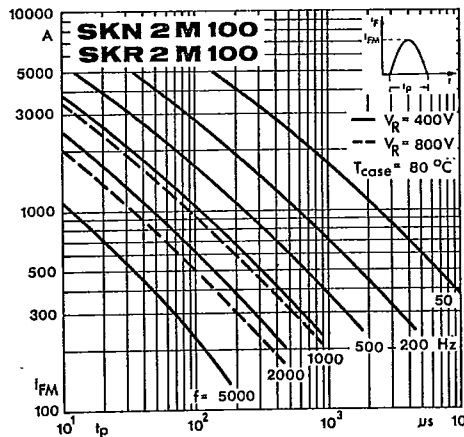


Fig. 1 b Rated sinusoidal peak forward current

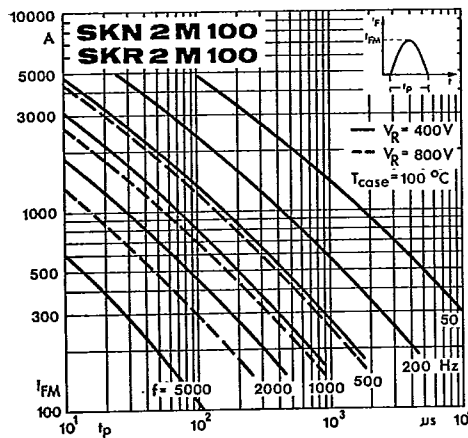


Fig. 1 c Rated sinusoidal peak forward current

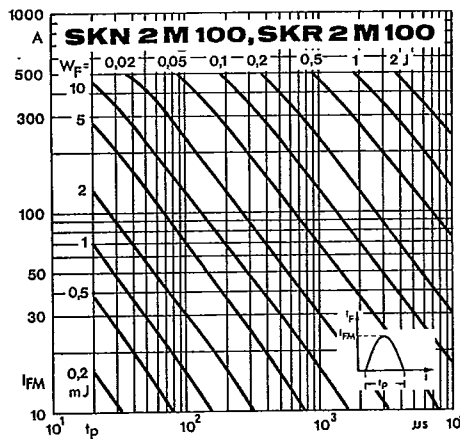


Fig. 2 Forward energy dissipation, sinusoidal

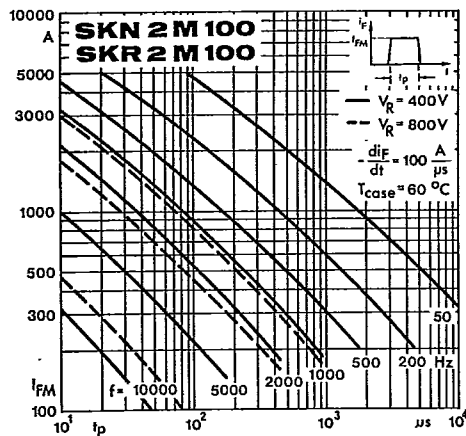


Fig. 3 a Rated rectangular peak forward current

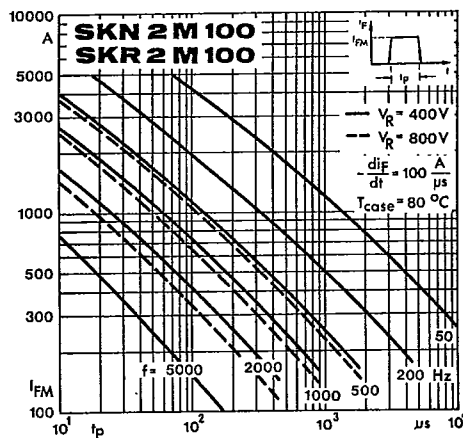


Fig. 3 b Rated rectangular peak forward current

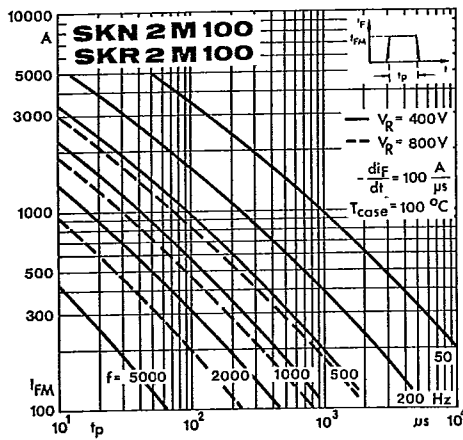


Fig. 3 c Rated rectangular peak forward current

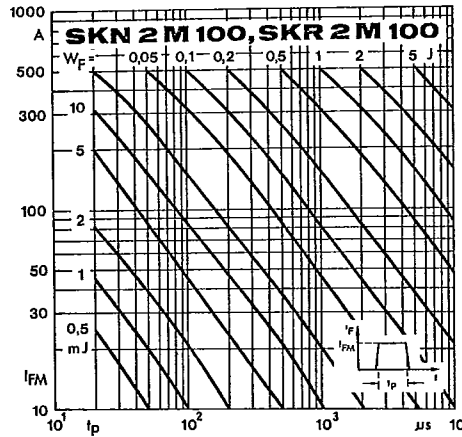


Fig. 4 Forward energy dissipation, rectangular

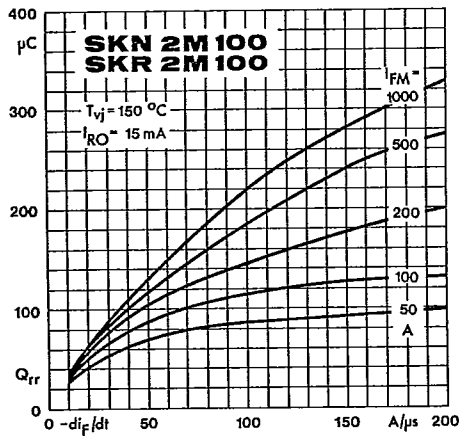


Fig. 5 Recovered charge

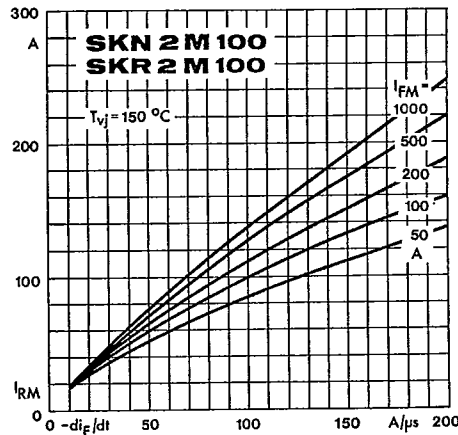


Fig. 6 Peak reverse recovery current

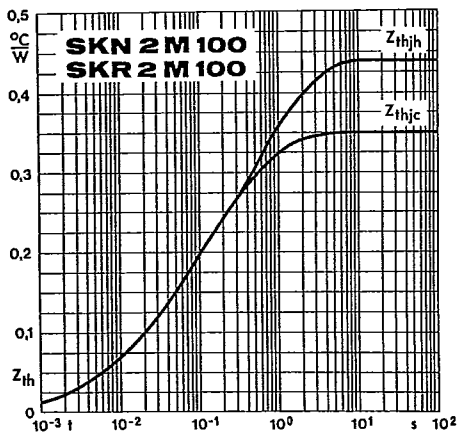


Fig. 7 Transient thermal impedance

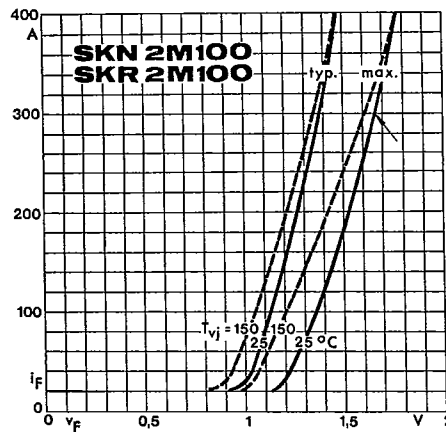


Fig. 8 Forward characteristics

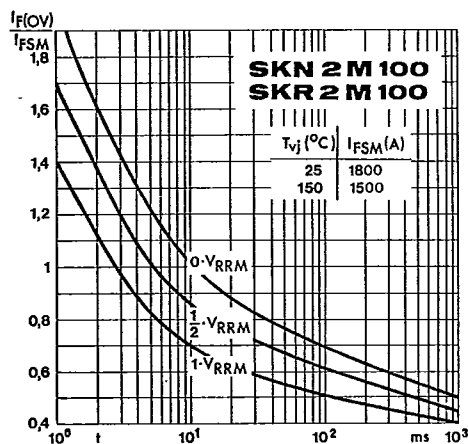
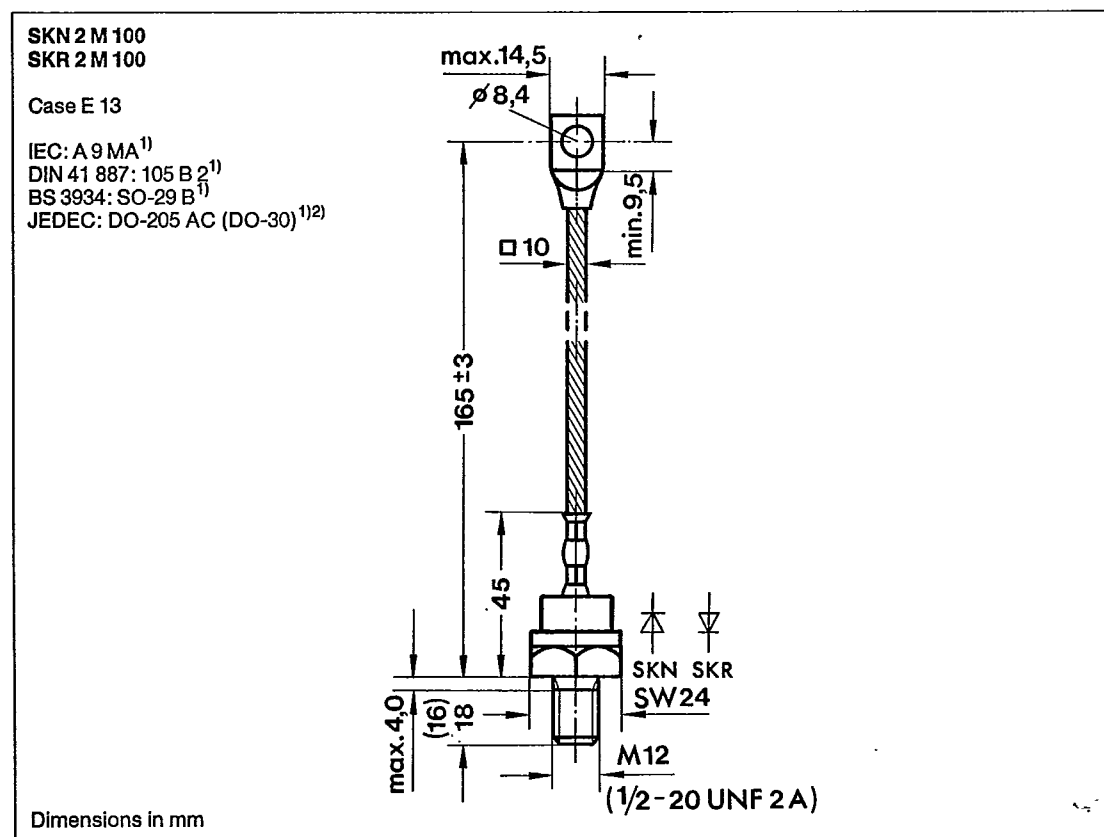


Fig. 9 Rated surge overload current



¹⁾ modified

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