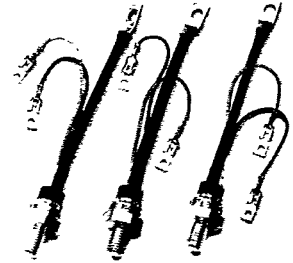


T.25-17

V _{RRM}	V _{RRM} V _{DRM}	(dv/dt) _{cr}	I _{RMS} (maximum values for continuous operation)		
			110 A	135 A	175 A
V	V	V/μs	I _{TAV} (sin. 180; T _{case} = 80 °C)		
			70 A	86 A	110 A
500	400	200	SKT 55/04 C	SKT 80/04 C	SKT 100/04 C
700	600	200	SKT 55/06 C*	SKT 80/06 C*	SKT 100/06 C*
900	800	200	SKT 55/08 C	SKT 80/08 C	SKT 100/08 C
1300	1200	200	SKT 55/12 C*	SKT 80/12 C*	SKT 100/12 C*
		1000	SKT 55/12 E	SKT 80/12 E	SKT 100/12 E
1500	1400	1000	SKT 55/14 E	SKT 80/14 E	SKT 100/14 E
1700	1600	1000	SKT 55/16 E*	SKT 80/16 E*	SKT 100/16 E*

Thyristors

SKT 55
SKT 80
SKT 100



Symbol	Conditions	SKT 55	SKT 80	SKT 100
I _{TAV}	sin. 180; (T _{case} = ... °C)	55 A (92 °C)	80 A (85 °C)	100 A (85 °C)
I _{RSM}	T _{vj} = 25 °C T _{vj} = 130 °C	1300 A 1100 A	1700 A 1500 A	2000 A 1750 A
i ² t	T _{vj} = 25 °C T _{vj} = 130 °C	8500 A ² s 6000 A ² s	14500 A ² s 11000 A ² s	20000 A ² s 15000 A ² s
t _{gd}	T _{vj} = 25 °C; I _G = 1 A; di _G /dt = 1 A/μs		typ. 1 μs	
t _{gr}	V _D = 0,67 · V _{DRM}		typ. 2 μs	
(di/dt) _{cr}	f = 50 ... 60 Hz		50 A/μs	
I _H	T _{vj} = 25 °C; typ./max.		150 mA/250 mA	
I _L	T _{vj} = 25 °C; typ./max.		300 mA/600 mA	
t _q	T _{vj} = 130 °C; typ.		100 μs	
V _T	T _{vj} = 25 °C; (I _T = ...); max.	1,8 V (200 A)	2,25 V (300 A)	1,75 V (300 A)
V _{T(TO)}	T _{vj} = 130 °C	0,9 V	1,2 V	1,0 V
r _T	T _{vj} = 130 °C	4 mΩ	4 mΩ	2,4 mΩ
I _{DD} , I _{RD}	T _{vj} = 130 °C; V _{DD} = V _{DRM} ; V _{RD} = V _{RRM}	25 mA	30 mA	30 mA
V _{GT}	T _{vj} = 25 °C		3 V	
I _{GT}	T _{vj} = 25 °C		150 mA	
V _{GD}	T _{vj} = 130 °C		0,25 V	
I _{GD}	T _{vj} = 130 °C		10 mA	
R _{thjc}	cont. sin. 180/rec. 120	0,40 °C/W 0,47/0,53 °C/W	0,25 °C/W 0,28/0,31 °C/W	
R _{thch}			0,08 °C/W	
T _{vj}			-40 ... +130 °C	
T _{stg}			-55 ... +150 °C	
M	SI units US units		10 Nm 90 lb. in.	
a			5·9,81m/s ²	
w		65 g		80 g
Case			B 5	

Features

- Hermetic metal cases with ceramic insulators
- Threaded studs ISO M12 or UNF 1/2-20
- Interchangeable with international standard cases

Typical Applications

- DC motor control (e. g. for machine tools)
- Controlled rectifiers (e. g. for battery charging)
- AC controllers (e. g. for temperature control)

* Available with UNF thread

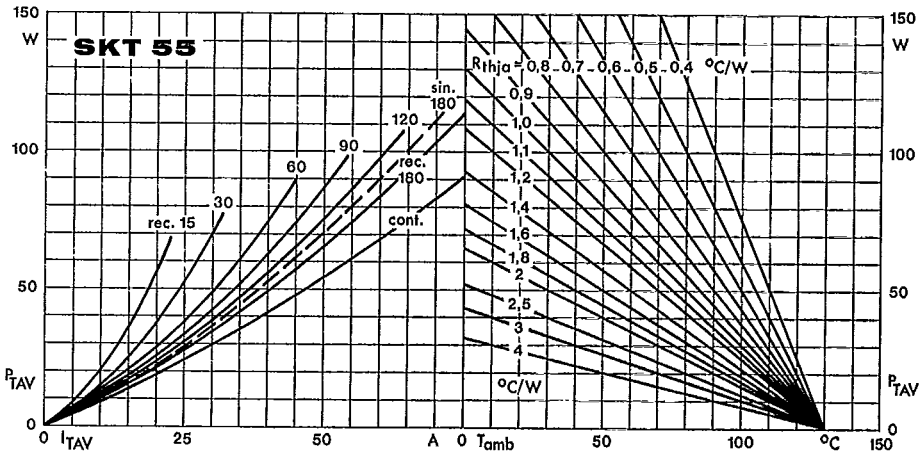


Fig. 1 a Power dissipation vs. on-state current and ambient temperature

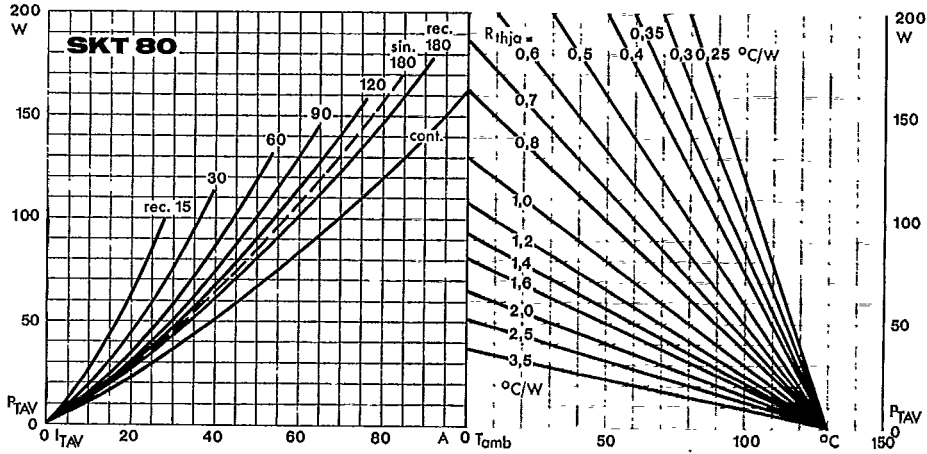


Fig. 1 b Power dissipation vs. on-state current and ambient temperature

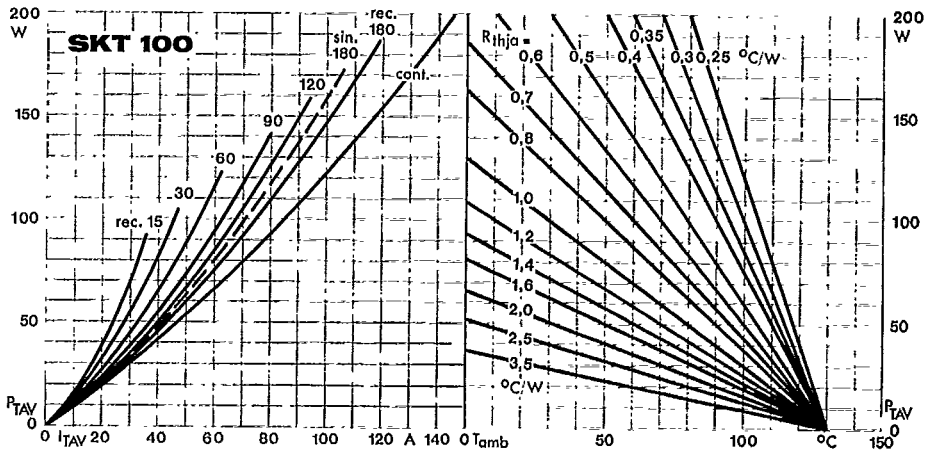


Fig. 1 c Power dissipation vs. on-state current and ambient temperature

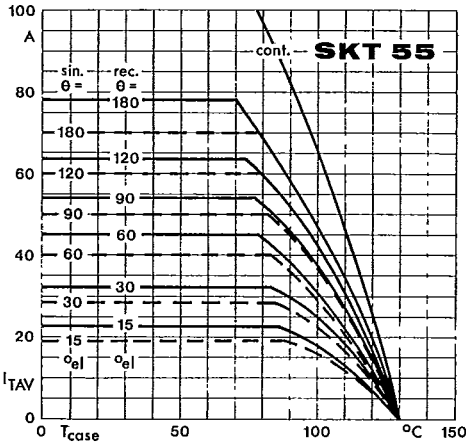


Fig. 2 a Rated on-state current vs. case temperature

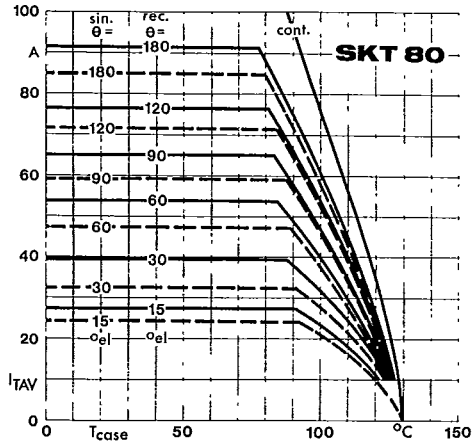


Fig. 2 b Rated on-state current vs. case temperature

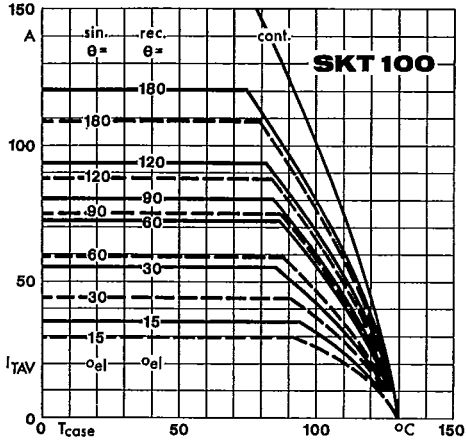


Fig. 2 c Rated on-state current vs. case temperature

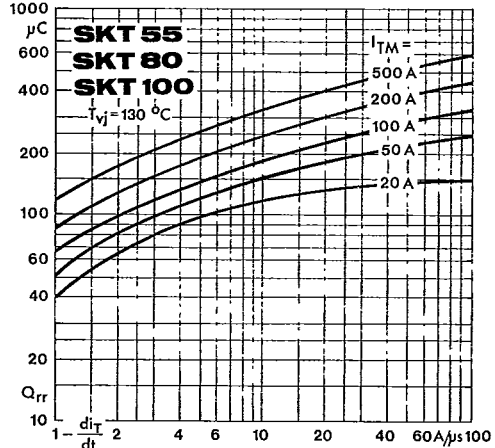


Fig. 3 Recovered charge vs. current decrease

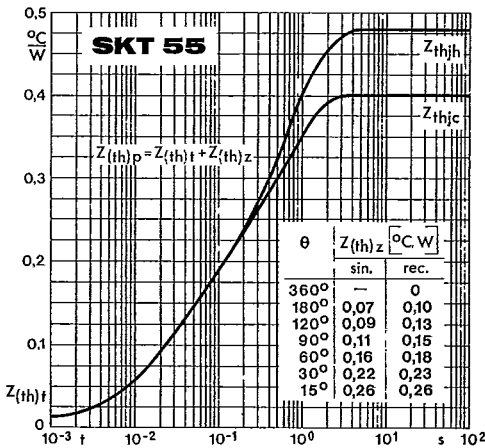


Fig. 4 a Transient thermal impedance vs. time

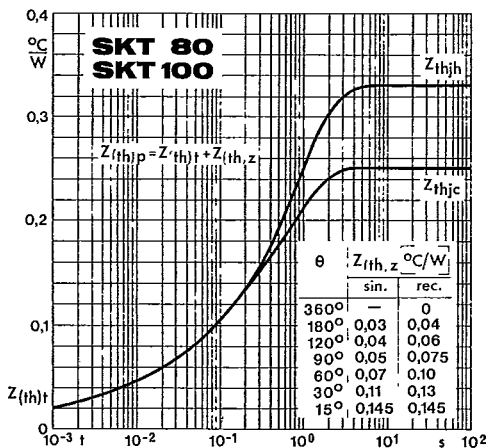


Fig. 4 b Transient thermal impedance vs. time

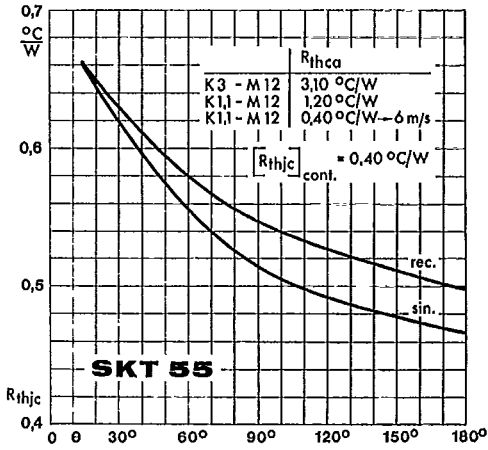


Fig. 5 a Thermal resistance vs. conduction angle

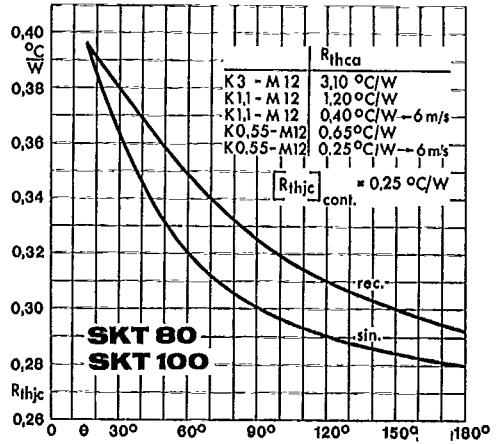


Fig. 5 b Thermal resistance vs. conduction angle

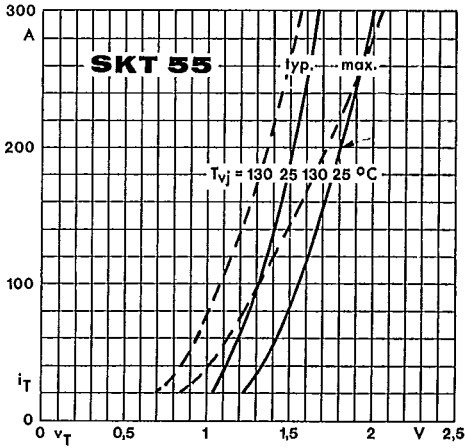


Fig. 6 a On-state characteristics

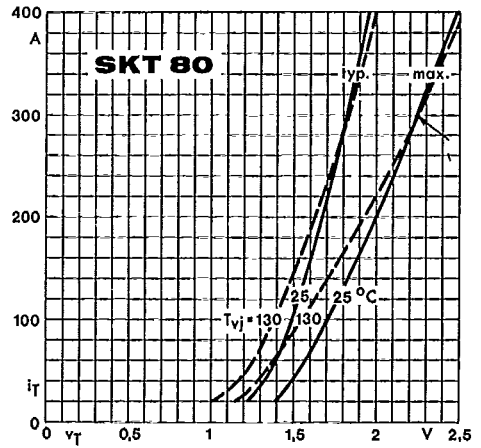


Fig. 6 b On-state characteristics

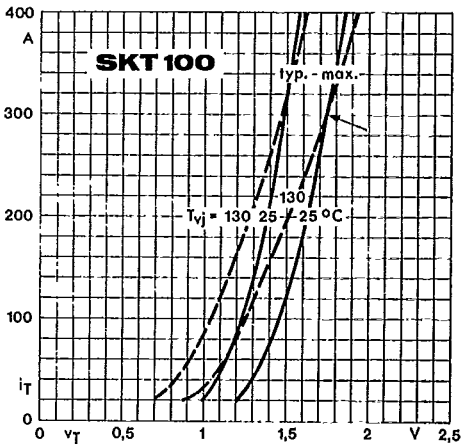


Fig. 6 c On-state characteristics

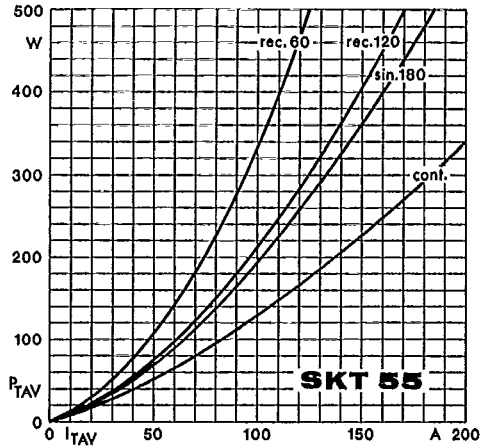


Fig. 7 a Power dissipation vs. on-state current

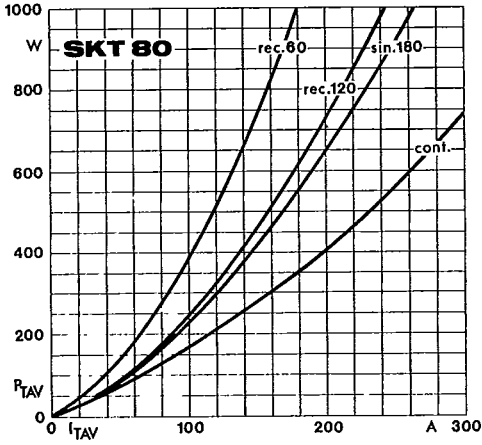


Fig. 7 b Power dissipation vs. on-state current

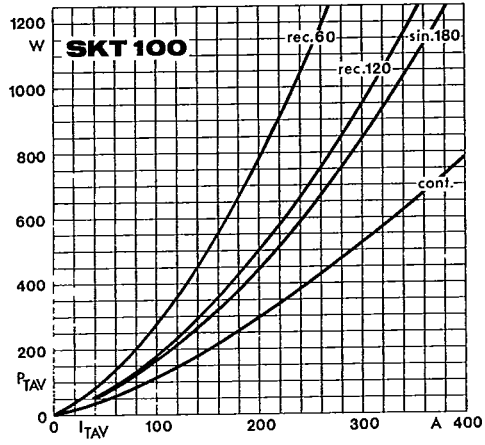


Fig. 7 c Power dissipation vs. on-state current

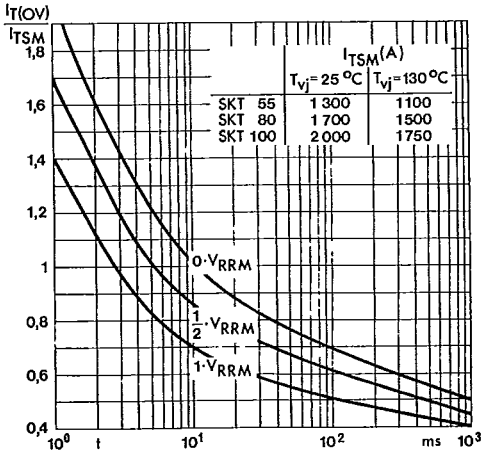


Fig. 8 Surge overload current vs. time

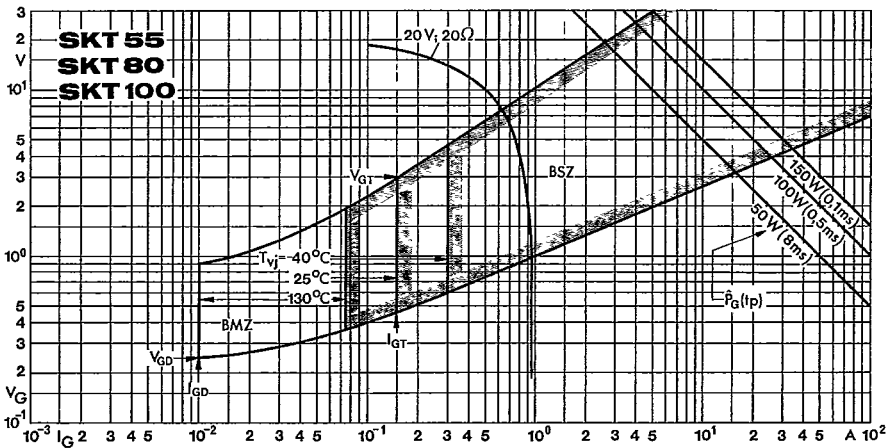
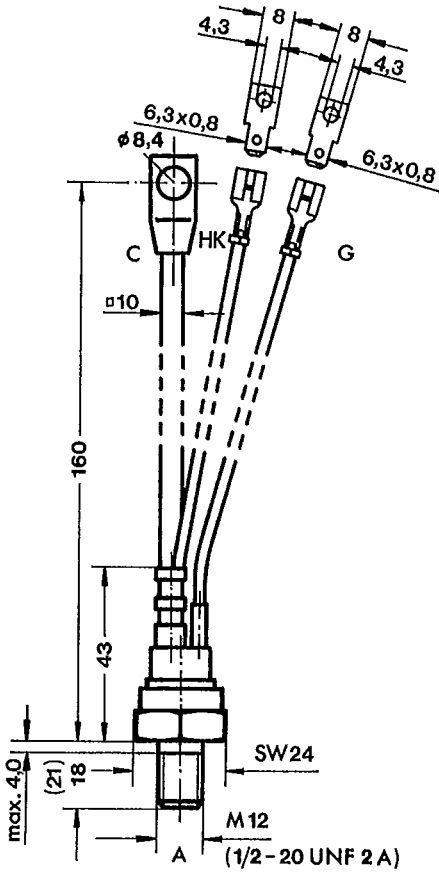


Fig. 9 Gate trigger characteristics

SKT 55
SKT 80
SKT 100

Case B 5

IEC-Publ. 191-2: (A 12 MA, A 12 U)
DIN 41892: (204 B 3)
BS 3934: SO-30 C
JEDEC: TO-209 (TO-94)¹⁾

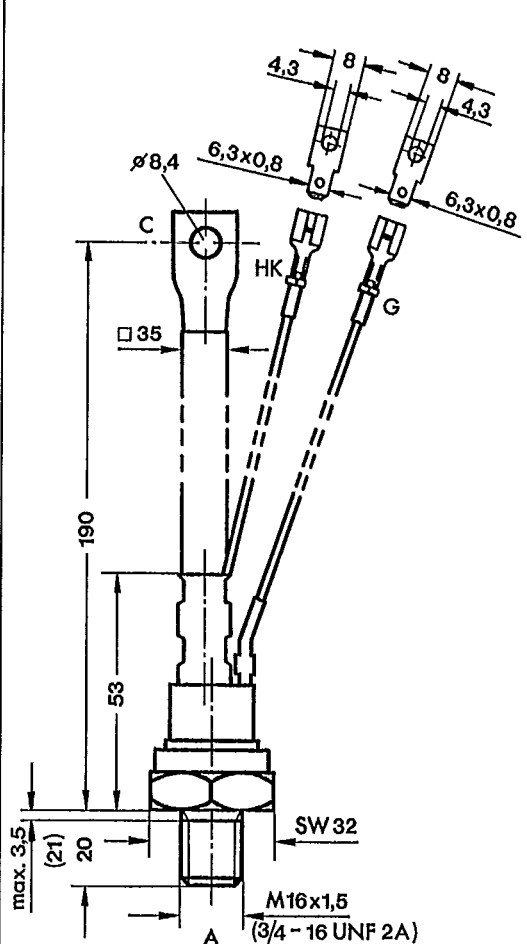


¹⁾ modified version. In the USA and Canada these types are available with the original TO-209 (TO-94) dimensions. TO-208 AD (TO-83) with flag terminals is also available.

SKT 130
SKT 160

Case B 6

IEC-Publ. 191-2: A 47 MC
DIN 41893: 205 B 4
JEDEC: TO-209 (TO-93)



Dimensions in mm

- C: Cathode terminal (red sleeve)
- A: Anode terminal
- G: Gate terminal (yellow sleeve)
- HK: Auxiliary cathode terminal (red sleeve)