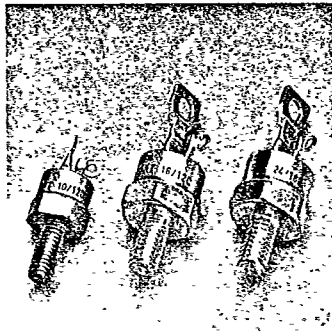


T-25-17

V _{RSM}	V _{RRM} V _{DRM}	(dv/dt) _{cr} V/μs	I _{TRMS} (maximum values for continuous operation)		
			30 A	40 A	50 A
V	V	V/μs	I _{TAV} (sin. 180; T _{case} = ... °C)		
			19 A (95 °C)	25 A (74 °C)	32 A (72 °C)
500	400	200		SKT 16/04 C	SKT 24/04 C
700	600	200		SKT 16/06 C*	SKT 24/06 C*
		500	SKT 10/06 D		
900	800	200		SKT 16/08 C	SKT 24/08 C
		500	SKT 10/08 D		
1100	1000	500	SKT 10/10 D		
1300	1200	200		SKT 16/12 C*	SKT 24/12 C*
		500	SKT 10/12 D		
		1000		SKT 16/12 E	SKT 24/12 E
1500	1400	1000		SKT 16/14 E	SKT 24/14 E
1700	1600	1000		SKT 16/16 E*	SKT 24/16 E*

Thyristors

- SKT 10
- SKT 16
- SKT 24



Symbol	Conditions	SKT 10	SKT 16	SKT 24
I _{TAV}	sin. 180; (T _{case} = ...)	10 A (106 °C)	16 A (103 °C)	24 A (94 °C)
I _{TRSM}	T _{vj} = 25 °C T _{vj} = 130 °C	250 A 210 A	370 A 330 A	450 A 380 A
i ² t	T _{vj} = 25 °C T _{vj} = 130 °C	310 A ² s 220 A ² s	680 A ² s 550 A ² s	1000 A ² s 720 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.	80 mA/150 mA		
I _L	T _{vj} = 25 °C; typ./max.	150 mA/300 mA		
t _q	T _{vj} = 130 °C; typ.	80 μs		
V _T	T _{vj} = 25 °C; (I _T = ...); max.	1,6 V (30 A)	2,4 V (75 A)	1,9 V (75 A)
V _{T(RO)}	T _{vj} = 130 °C	1,0 V	1,0 V	1,0 V
r _T	T _{vj} = 130 °C	18 mΩ	20 mΩ	10 mΩ
I _{DD} , I _{RD}	T _{vj} = 130 °C; V _{DD} = V _{DRM} ; V _{RD} = V _{RRM}	4 mA	8 mA	8 mA
V _{GT}	T _{vj} = 25 °C	3 V		
I _{GT}	T _{vj} = 25 °C	100 mA		
V _{GD}	T _{vj} = 130 °C	0,25 V		
I _{GD}	T _{vj} = 130 °C	3 mA		
R _{thjc}	cont. sin. 180/rec. 120	1,2 °C/W 1,3/1,35 °C/W	0,8 °C/W 0,9/0,95 °C/W	
R _{thch}		1,0 °C/W	0,5 °C/W	
T _{vj}		-40 ... +130 °C	-40 ... +130 °C	
T _{stg}		-55 ... +150 °C	-55 ... +150 °C	
M	SI units US units	2,0 Nm 18 lb. in.	2,5 Nm 22 lb. in.	
a		5 · 9,81 m/s ²	5 · 9,81 m/s ²	
w		7 g	12 g	
Case		B 1	B 2	B 2

Features

- Hermetic metal cases with glass insulators
- Threaded studs ISO M5 and M6 or UNF 10-32 and 1/4-28
- 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, for example SKT 16/06 C UNF

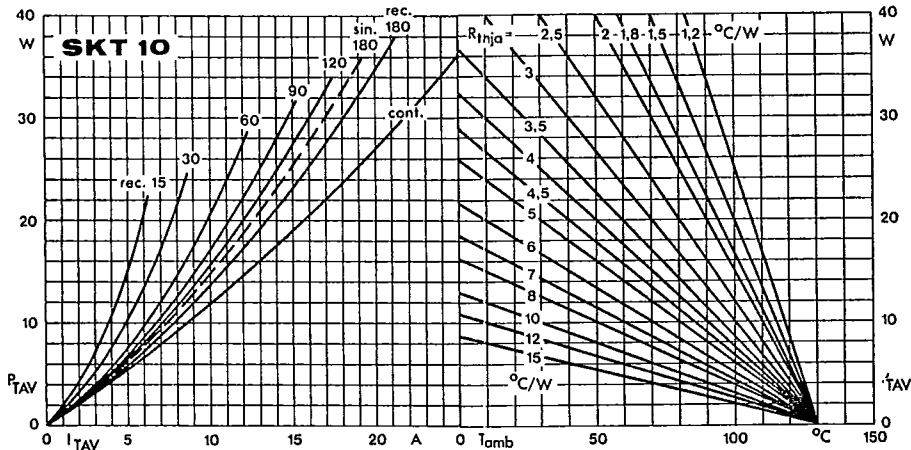


Fig. 1 a Power dissipation vs. on-state current and ambient temperature

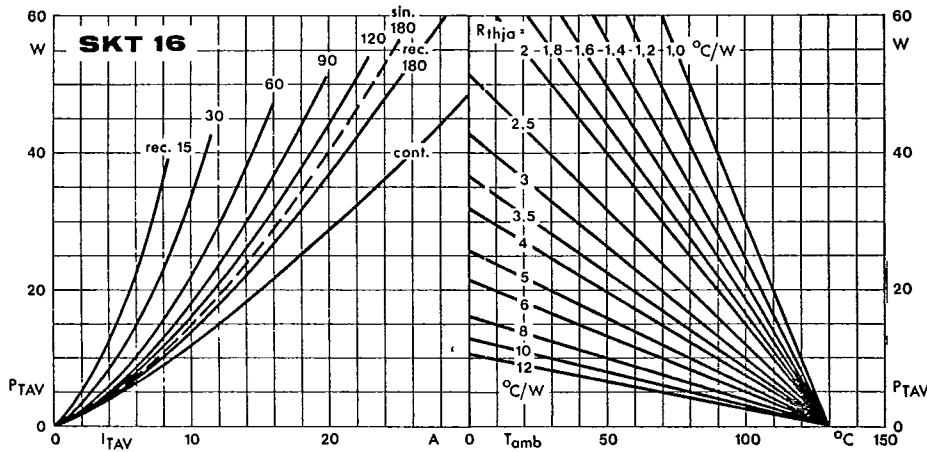


Fig. 1 b Power dissipation vs. on-state current and ambient temperature

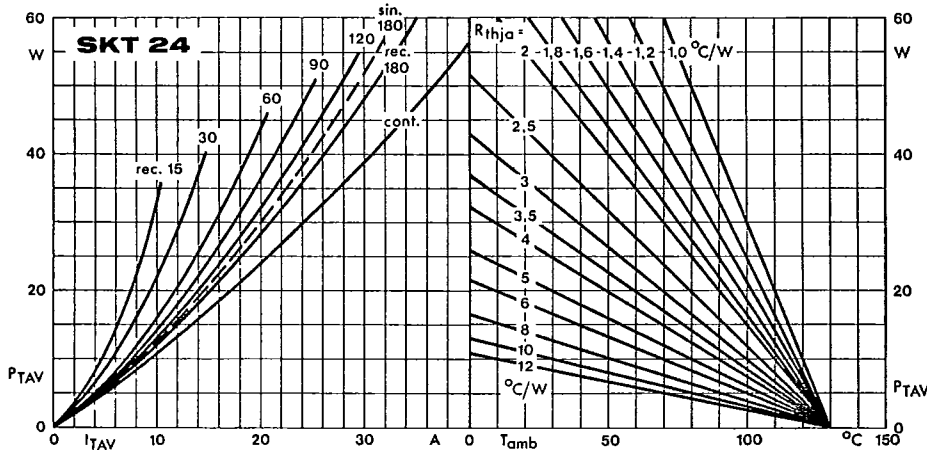


Fig. 1 c Power dissipation vs. on-state current and ambient temperature

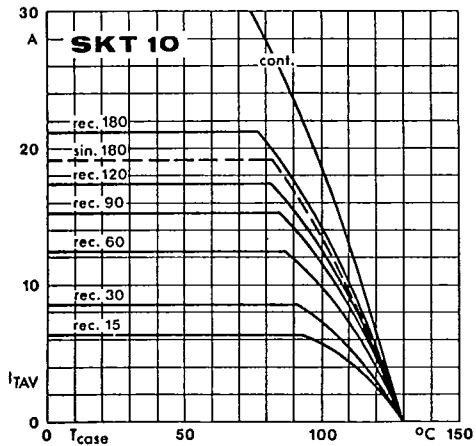


Fig. 2 a Rated on-state current vs. case temperature

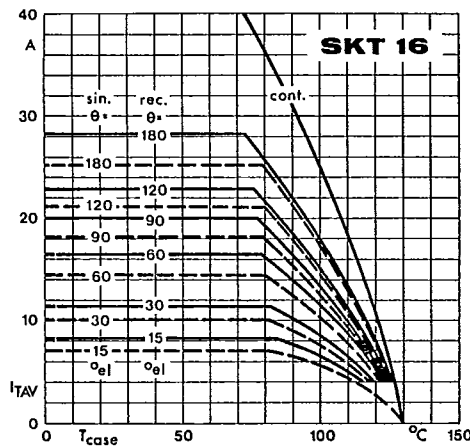


Fig. 2 b

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

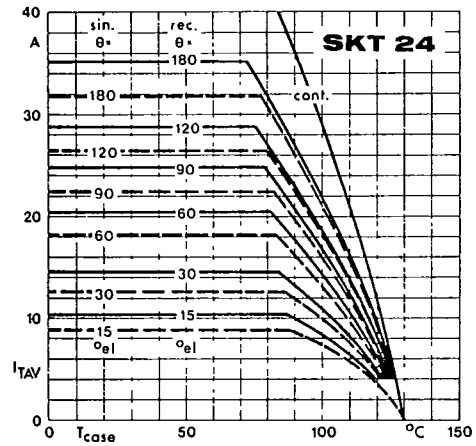


Fig. 2 c Rated on-state current vs. case temperature

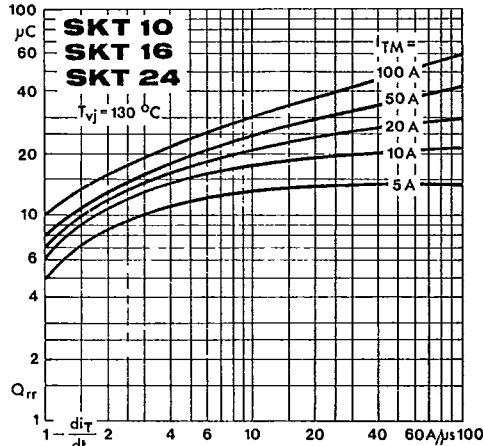


Fig. 3 Recovered charge vs. current decrease

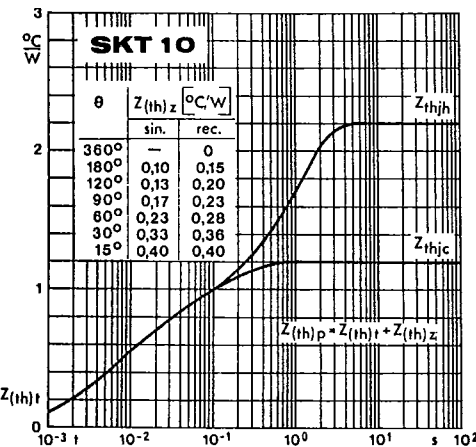


Fig. 4 a Transient thermal impedance vs. time

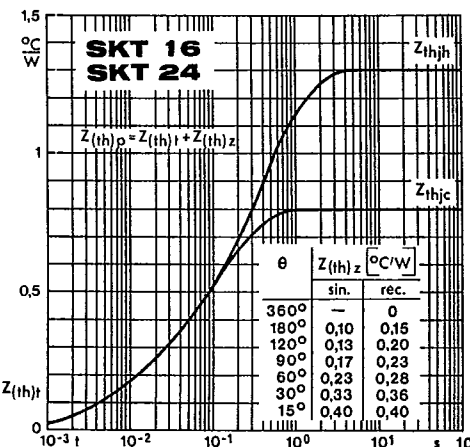


Fig. 4 b

Fig. 4 b Transient thermal impedance vs. time

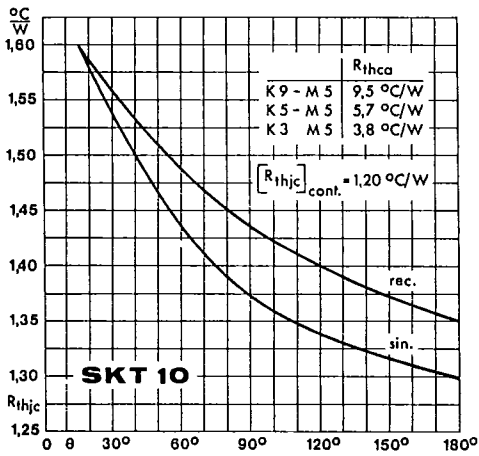


Fig. 5 a Thermal resistance vs. conduction angle

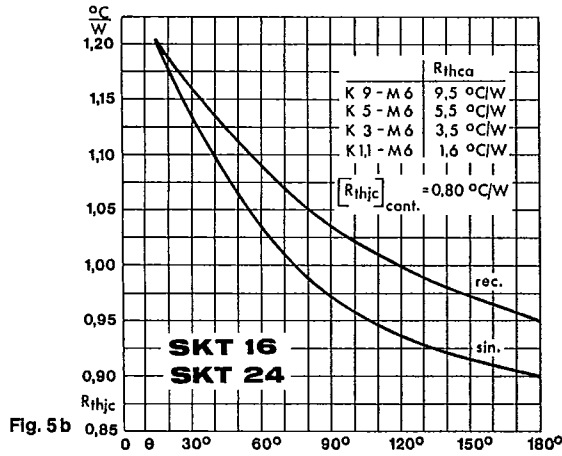


Fig. 5 b Thermal resistance vs. conduction angle

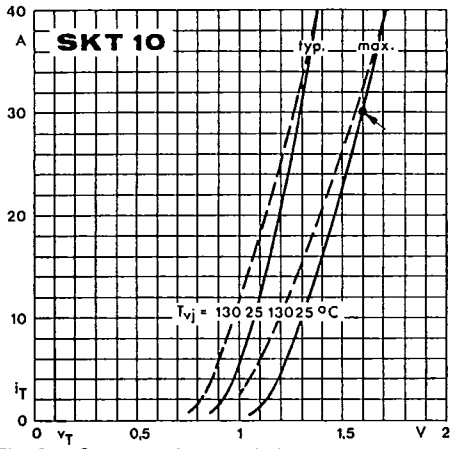


Fig. 6 a On-state characteristics

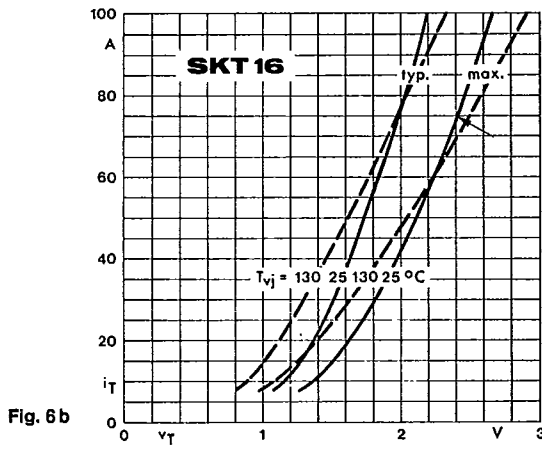


Fig. 6 b On-state characteristics

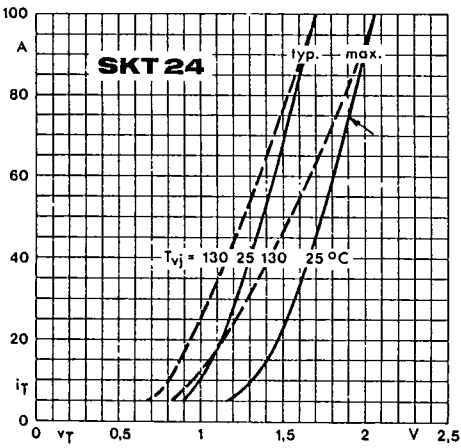


Fig. 6 c On-state characteristics

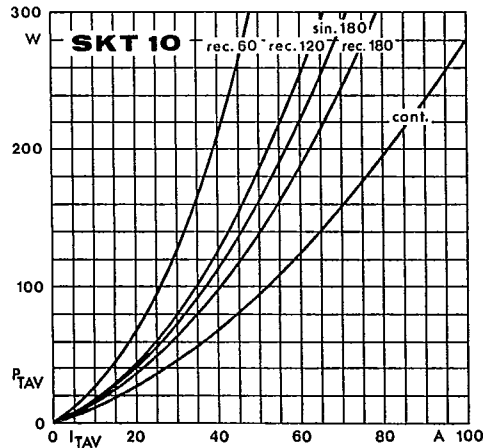


Fig. 7 a Power dissipation vs. on-state current

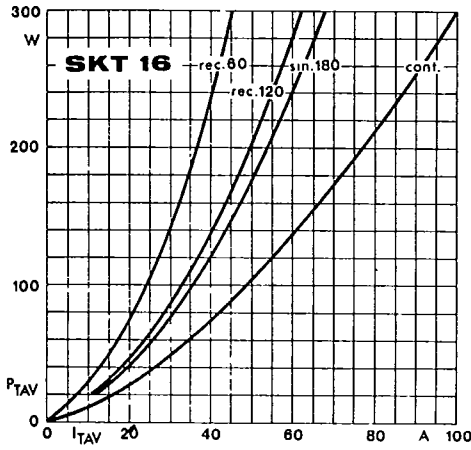


Fig. 7 b Power dissipation vs. on-state current

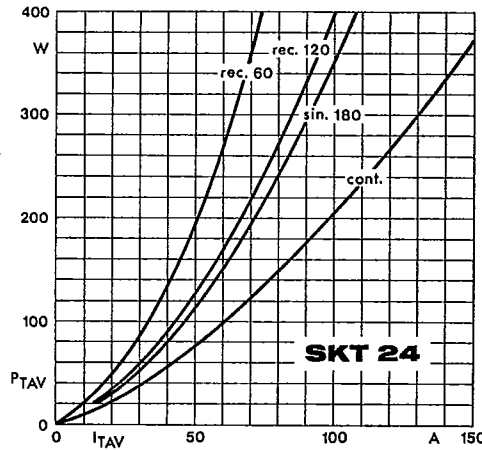


Fig. 7 c Power dissipation vs. on-state current

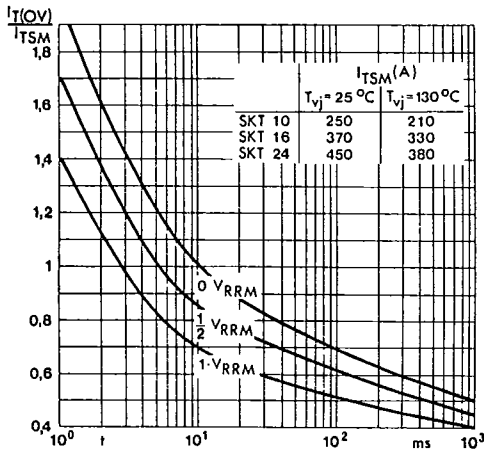


Fig. 8 Surge overload current vs. time

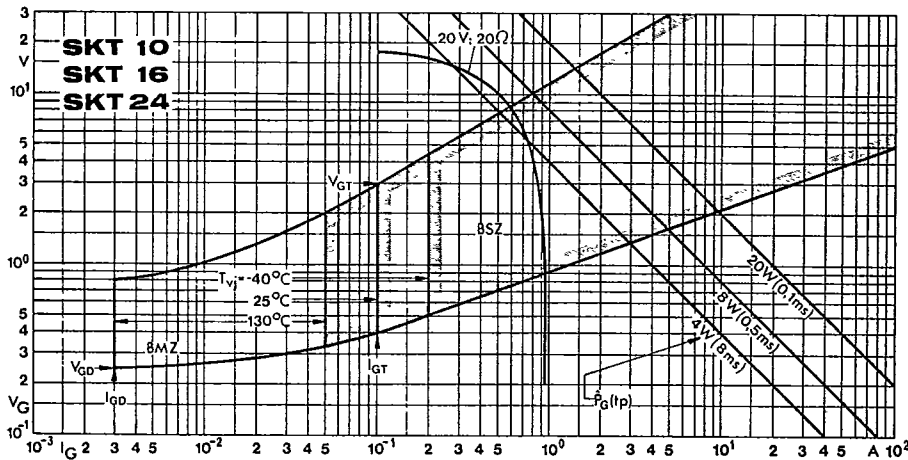


Fig. 9 Gate trigger characteristics

SKT 10

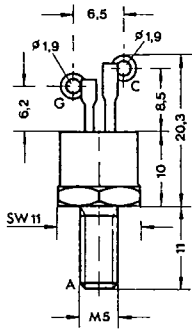
Case B 1

IEC-Publ. 191-2: A 13 M

DIN 41891: 200 B 3

BS 3934: SO-35 A

JEDEC: TO-208 AB (TO-64) metric



SKT 16

SKT 24

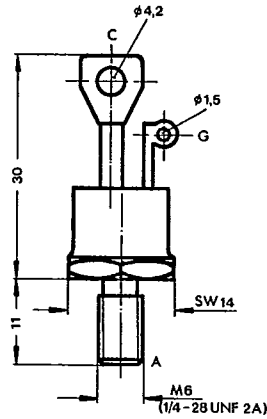
Case B 2

IEC-Publ. 191-2: A 11 M, A 11 U

DIN 41892: 201 C 3

BS 3934: SO-36

JEDEC: TO-208 AA (TO-48)



SKT 40

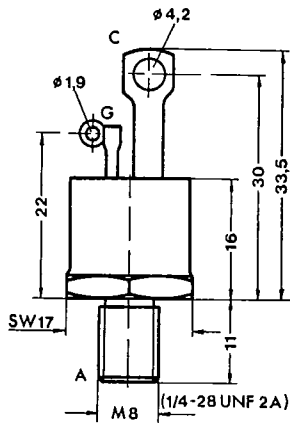
Case B 3

IEC-Publ. 191-2: A 38 MA, A 14 U

DIN 41892: 202 C 3

BS 3934: SO-28

JEDEC: TO-208 AC (TO-65)



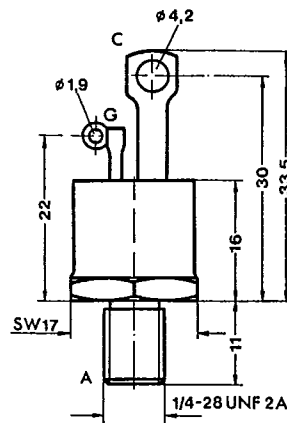
SKT 50

Case B 4

IEC-Publ. 191-2: A 14 U

BS 3934: SO-28

JEDEC: TO-208 AC (TO-65)



C: Cathode terminal
A: Anode terminal
G: Gate terminal

Dimensions in mm