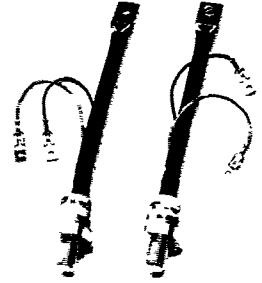


T.25-19

V <sub>RSM</sub>	V <sub>RRM</sub> V <sub>DRM</sub>	(dv/dt) <sub>cr</sub> V/μs	I <sub>T</sub> RMS (maximum values for continuous operation)	
			220 A	280 A
V	V	V/μs	I <sub>TAV</sub> (sin. 180; T <sub>case</sub> = ... °C) 140 A (80 °C)	I <sub>TAV</sub> (sin. 180; T <sub>case</sub> = ... °C) 178 A (78 °C)
500	400	200	<b>SKT 130/04 C</b>	<b>SKT 160/04 C</b>
700	600	200	<b>SKT 130/06 C*</b>	<b>SKT 160/06 C</b>
900	800	200	<b>SKT 130/08 C</b>	<b>SKT 160/08 C</b>
1300	1200	200	<b>SKT 130/12 C*</b>	<b>SKT 160/12 C*</b>
		1000	<b>SKT 130/12 E</b>	<b>SKT 160/12 E</b>
1500	1400	1000	<b>SKT 130/14 E</b>	<b>SKT 160/14 E</b>
1700	1600	1000	<b>SKT 130/16 E*</b>	<b>SKT 160/16 E*</b>

**Thyristors**

**SKT 130**  
**SKT 160**



Symbol	Conditions	SKT 130	SKT 160
I <sub>TAV</sub>	sin. 180; T <sub>case</sub> = 85 °C	130 A	160 A
I <sub>TSM</sub>	T <sub>vj</sub> = 25 °C T <sub>vj</sub> = 130 °C	3500 A 3000 A	4300 A 3750 A
i <sup>2</sup> t	T <sub>vj</sub> = 25 °C T <sub>vj</sub> = 130 °C	61 000 A <sup>2</sup> s 45 000 A <sup>2</sup> s	92 500 A <sup>2</sup> s 70 000 A <sup>2</sup> s
t <sub>gd</sub> t <sub>gr</sub> (di/dt) <sub>cr</sub>	T <sub>vj</sub> = 25 °C; I <sub>G</sub> = 1 A; di <sub>G</sub> /dt = 1 A/μs V <sub>D</sub> = 0,67 · V <sub>DRM</sub> f = 50 ... 60 Hz	typ. 1 μs typ. 2 μs 100 A/μs	
I <sub>H</sub>	T <sub>vj</sub> = 25 °C; typ./max.	150 mA/250 mA	
I <sub>L</sub>	T <sub>vj</sub> = 25 °C; R <sub>G</sub> = 33 Ω; typ./max.	300 mA/600 mA	
t <sub>q</sub>	T <sub>vj</sub> = 130 °C; typ.	120 μs	
V <sub>T</sub>	T <sub>vj</sub> = 25 °C; I <sub>T</sub> = 500 A; max.	2,25 V	1,75 V
V <sub>T(RO)</sub>	T <sub>vj</sub> = 130 °C	1,2 V	1,0 V
r <sub>T</sub>	T <sub>vj</sub> = 130 °C	2,2 mΩ	1,5 mΩ
I <sub>DD</sub> , I <sub>RD</sub>	T <sub>vj</sub> = 130 °C; V <sub>DD</sub> = V <sub>DRM</sub> ; V <sub>RD</sub> = V <sub>RRM</sub>	50 mA	50 mA
V <sub>GT</sub>	T <sub>vj</sub> = 25 °C	3 V	
I <sub>GT</sub>	T <sub>vj</sub> = 25 °C	200 mA	
V <sub>GD</sub>	T <sub>vj</sub> = 130 °C	0,25 V	
I <sub>GD</sub>	T <sub>vj</sub> = 130 °C	10 mA	
R <sub>thjc</sub>	cont. sin. 180/rec. 120	0,16 °C/W 0,18/0,20 °C/W	
R <sub>thch</sub>		0,03 °C/W	
T <sub>vj</sub>		-40 ... +130 °C	
T <sub>stg</sub>		-55 ... +150 °C	
M	SI units	30 Nm	
a	US units	265 lb. in.	
w		5·9,81 m/s <sup>2</sup>	
		2,10 g	
Case		B 6	

**Features**

- Hermetic metal cases with ceramic insulators
- Threaded studs ISO M16 x 1,5 or UNF 3/4-16
- 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

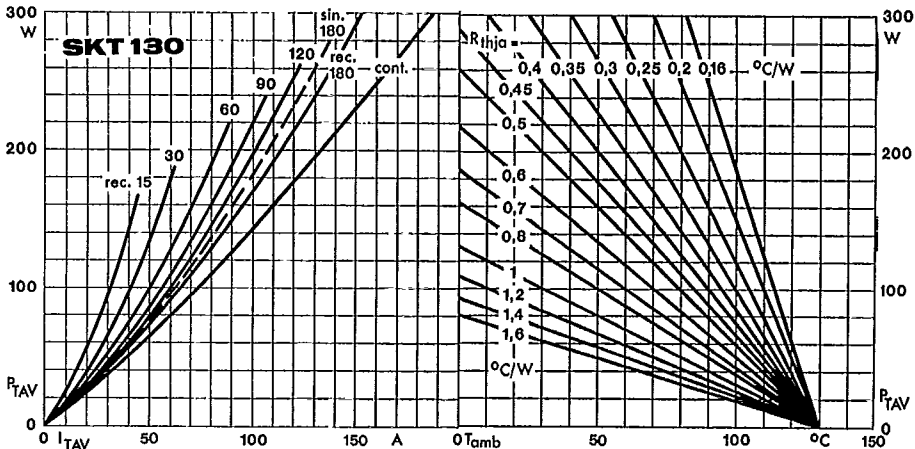


Fig. 1 a Power dissipation vs. on-state current and ambient temperature

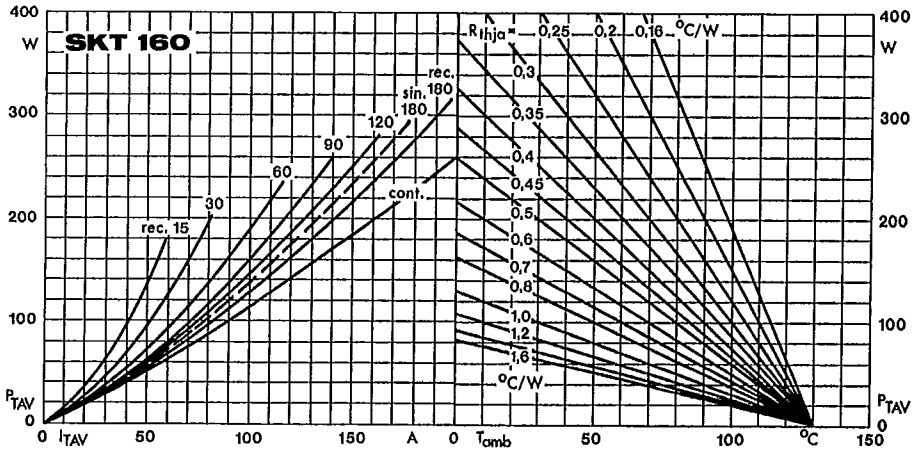


Fig. 1 b Power dissipation vs. on-state current and ambient temperature

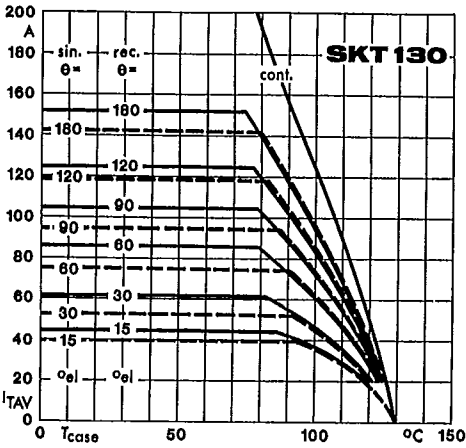


Fig. 2 a Rated on-state current vs. case temperature

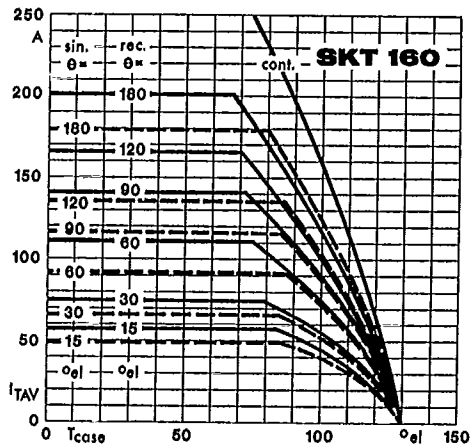


Fig. 2 b Rated on-state current vs. case temperature

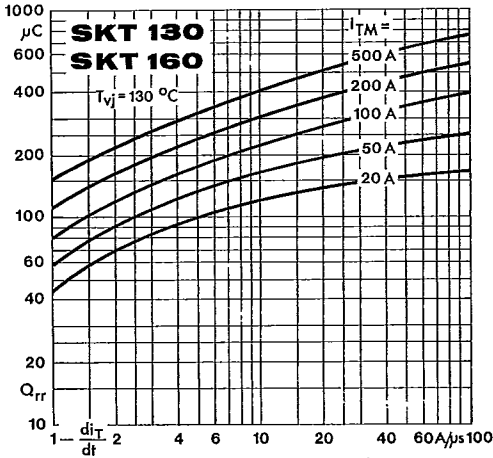


Fig. 3 Recovered charge vs. current decrease

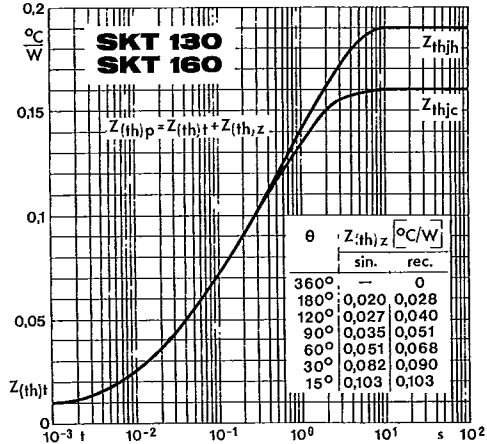


Fig. 4 Transient thermal impedance vs. time

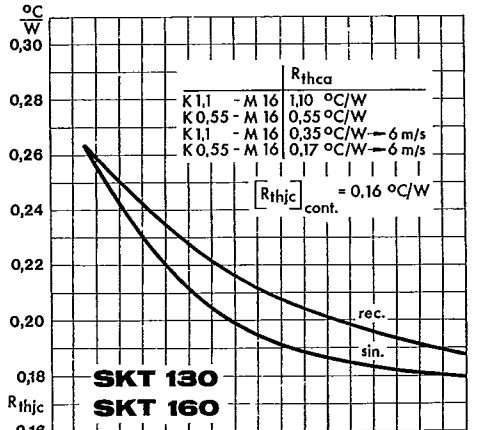


Fig. 5 Thermal resistance vs. conduction angle

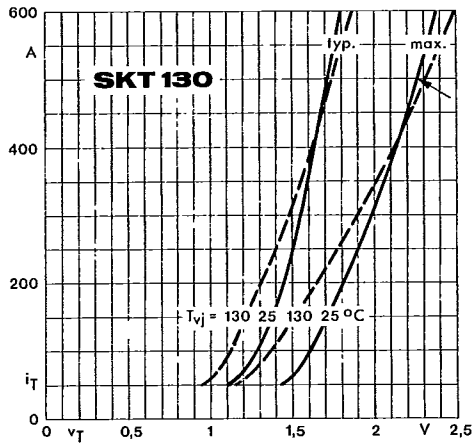


Fig. 6 a On-state characteristics

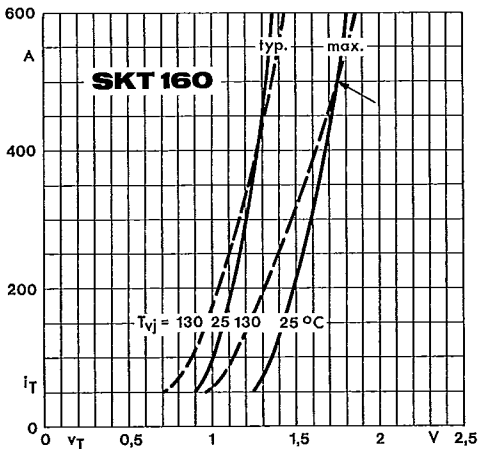


Fig. 6 b On-state characteristics

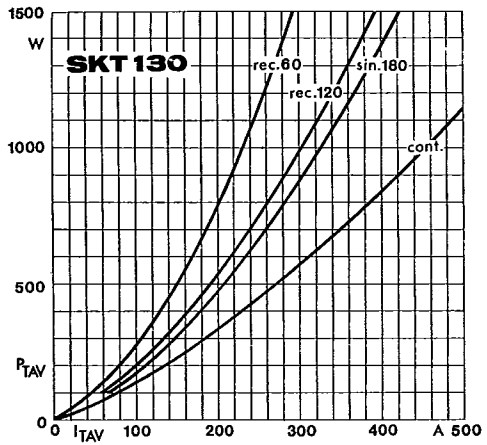


Fig. 7 a Power dissipation vs. on-state current

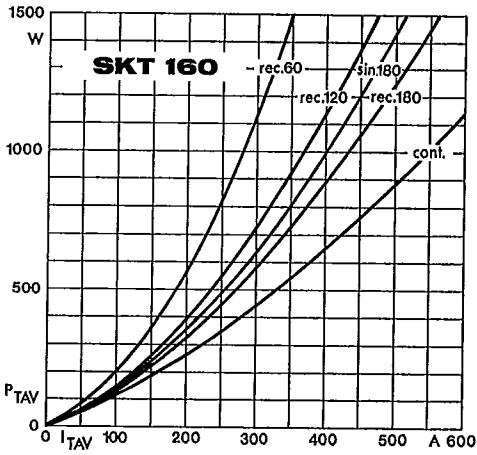


Fig. 7 b Power dissipation vs. on-state current

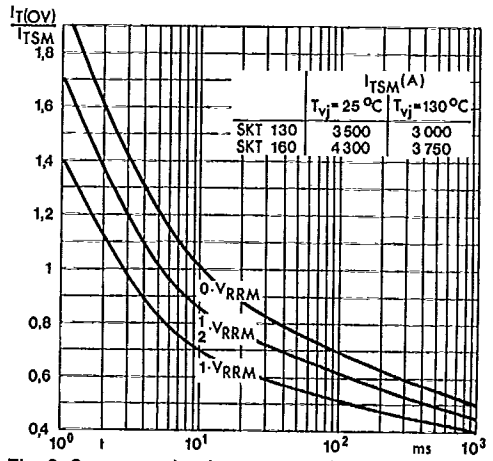


Fig. 8 Surge overload current vs. time

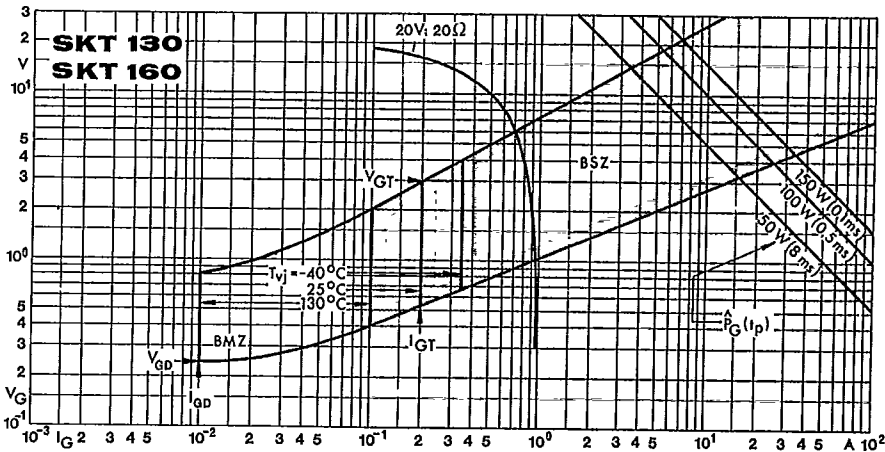


Fig. 9 Gate trigger characteristics