SKT16

Line Thyristor

STUD VERSION

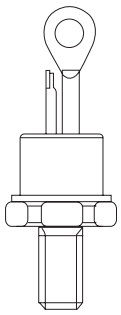
Liujing rectifier co., Ltd.

FEATURES

2). Hermetic metal case with glass insulator
3). Threaded stud ISO M6 or UNF 1/4-28
4). International standard case

TYPICAL APPLICATIONS

1). DC motor control (e.g. for machine tools)
2). Controlled rectifiers (e.g. for battery charging)
3). AC controllers (e.g. for temperature control)
4). Recommended snubber network:
e.g. for V_{VRMS}≤400V: R=100Ω/5W, C=0.1μF



MAJOR RATINGS AND CHARACTERISTICS

V_{RSM} V	V_{RRM}, V_{DRM} V	I_{TRMS}=40A (maximum value for continuous operation) I_{TAV}=16A (sin. 180° ; T_C=104℃)
500	400	SKT 16/04D
700	600	SKT 16/06D[1)*]
900	800	SKT 16/08D
1300	1200	SKT 16/12E[1)*]
1500	1400	SKT 16/14E
1700	1600	SKT 16/16E
1900	1800	SKT 16/18E

1)* Available with UNF thread 1/4-28 UNF2A, e.g. SKT 16/06D UNF

ELECTRICAL SPECIFICATIONS

Symbol	Conditions	Values	V
I_{TAV}	sin. 180; T_C=100(85)℃	18(23)	A
I_D	K5; T_a=45℃; B2/B6	18/24	A
	K3; T_a=45℃; B2/B6	24/33	A
I_{RSM}	K5; T_a=45℃; W1C	20	A
I_{TSM}	T_{vj}=25℃; 10ms	370	A
	T_{vj}=130℃; 10ms	330	A
I^2t	T_{vj}=25℃; 8,35 ... 10ms	680	A_2S
	T_{vj}=130℃; 8,35 ... 10ms	550	A_2S
V_T	T_{vj}=25℃; I_T=75A	max. 2.4	V
$V_{T(TO)}$	T_{vj}=130℃	max. 1	V
r_T	T_{vj}=130℃	max. 20	mΩ
I_{DD}; I_{RD}	T_{vj}=130℃; V_{RD}=V_{RRM}; V_{DD}=V_{DRM}	max. 8	mA
t_{gd}	T_{vj}=25℃; I_G=1A; di_G/dt=1A μs	1	μs
t_{gr}	V_D=0.67 * V_{DRM}	2	μs
$(di/dt)_{cr}$	T_{vj}=130℃	max. 50	A/μs
$(dv/dt)_{cr}$	T_{vj}=130℃; SKT ... D/SKT ... E	max. 500/1000	V/μs
t_q	T_{vj}=130℃	80	μs
I_H	T_{vj}=25℃; typ./max.	80/150	mA
I_L	T_{vj}=25℃; typ./max.	150/300	mA

Symbol	Conditions	Values	V
V_{GT}	T_{vj}=25℃; d.c.	min.3	V
I_{GT}	T_{vj}=25℃; d.c.	min.100	mA
V_{GD}	T_{vj}=130℃; d.c.	max.0.25	V
I_{GD}	T_{vj}=130℃; d.c.	max.3	mA
$R_{th(j-c)}$	cont.	0.8	K/W
$R_{th(j-c)}$	sin.180	0.9	K/W
$R_{th(j-c)}$	rec.120	0.95	K/W
$R_{th(c-s)}$		0.5	K/W
T_{vj}		-40 ... +130	℃
T_{stg}		-40 ... +150	℃
V_{isol}		-	V~
M_s	to heatsink	2.5	Nm
a		5*9.81	m/s^2
m	approx.	13	g
Case		B2	

PERFORMANCE CURVES FIGURE

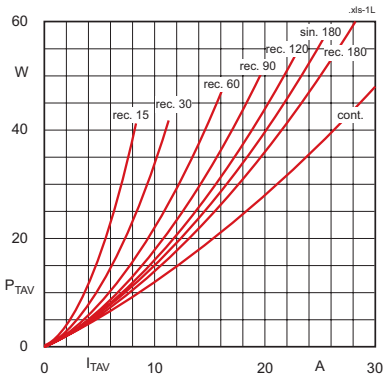


Fig. 1L Power dissipation vs. on-state current

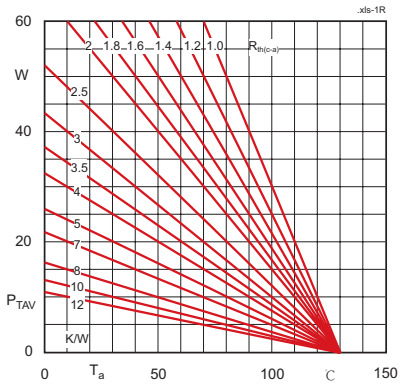


Fig. 1R Power dissipation vs. ambient temperature

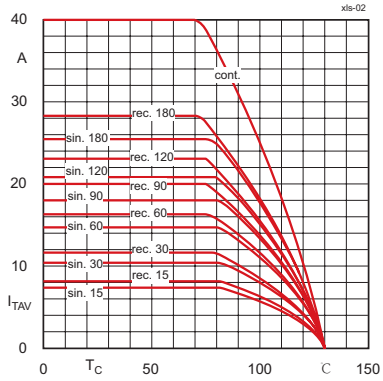


Fig. 2 Rated on-state current vs. case temperature

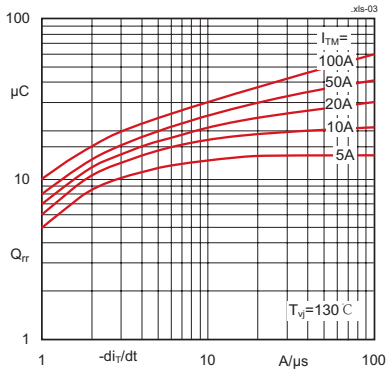


Fig. 3 Recovered charge vs. current decrease

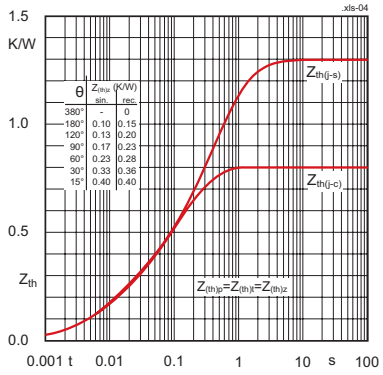


Fig. 4 Transient thermal impedance vs. time

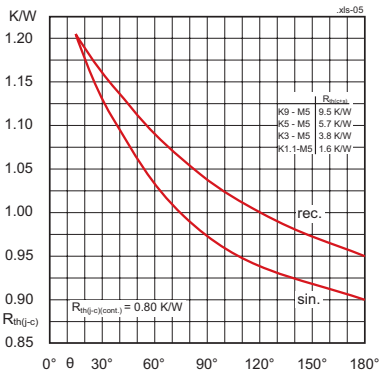


Fig. 5 Thermal resistance vs. conduction angle

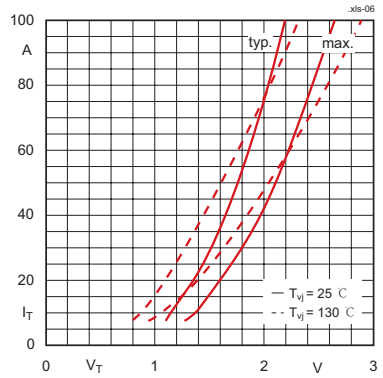


Fig. 6 On-state characteristics

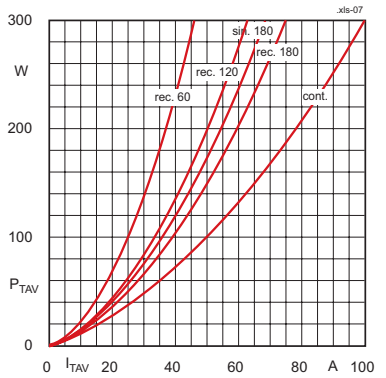


Fig. 7 Power dissipation vs. on-state current

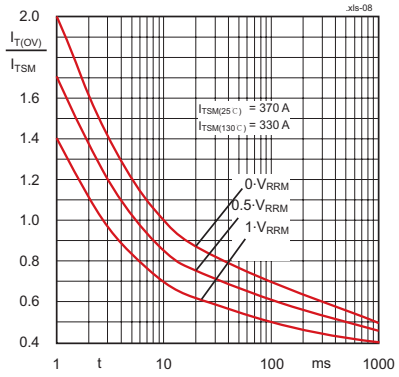


Fig. 8 Surge overload curent vs. time

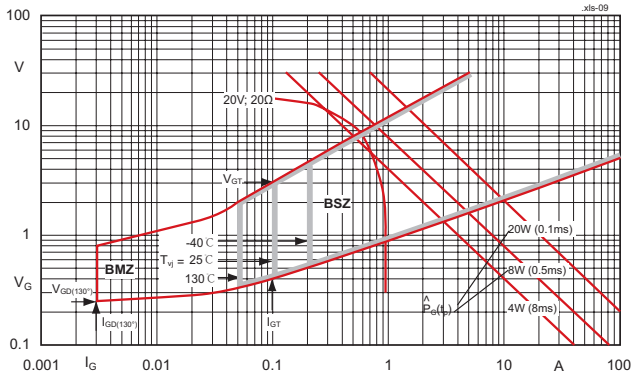
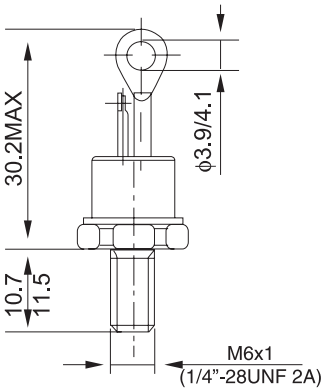
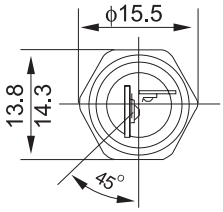


Fig. 9 Gate trigger characteristics

OUTLINE





SKT4

LiUJiNG Liujing Electronics

E-mail: rectifier@163.com thyristors@yahoo.cn

YUEQING LIUJING RECTIFIER CO., LTD
Sale Departmant: Liujing Building, Yueqing City, Zhejiang Province
Add: Wanao Industrial Zone, Yueqing city, Zhejiang Province
Tel: 0086-577-62519692 0089-577-62519693
Fax: 0086-577-62518692
International Export: 0086-577-62571902
Technical Support: 0086-15868768965
After Service: 400-6606-086
http://www.china-liujing.com
http://www.liujingdianqi.cn
http://www.cnrectifier.com
http://www.cnthyristor.com.cn
MSN: thristors@hotmail.com

打造最具竞争力的电力半导体产品

To be the most competitive Power Semiconductor Devices manufactory.