

SKKT162,SKKH162

Features

- Heat transfer through aluminium oxide ceramic isolated metal
- Hard soldered joints for high reliability
- Space and weight savings

Typical Applications

- Various rectifiers
- AC/DC Motor drives
- DC supply for PWM inverter

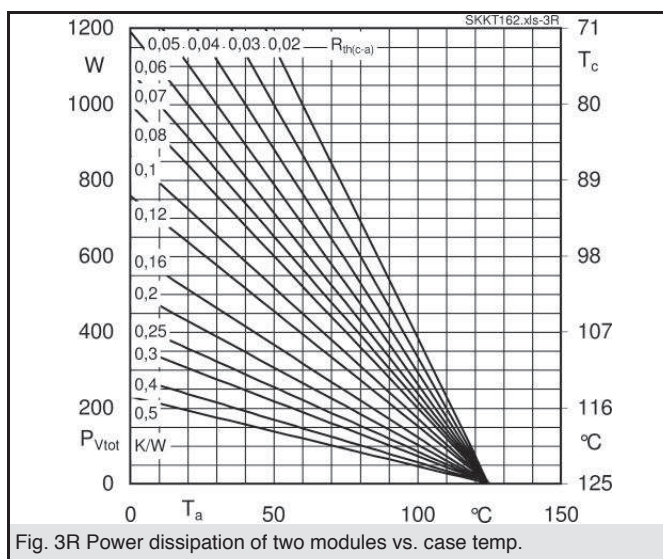
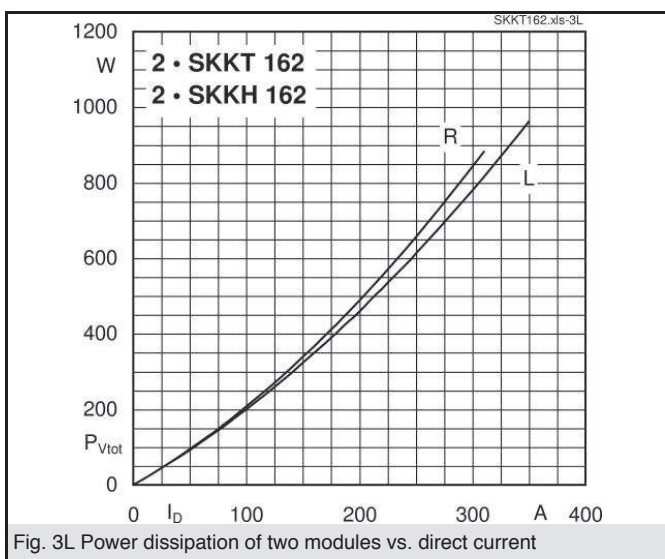
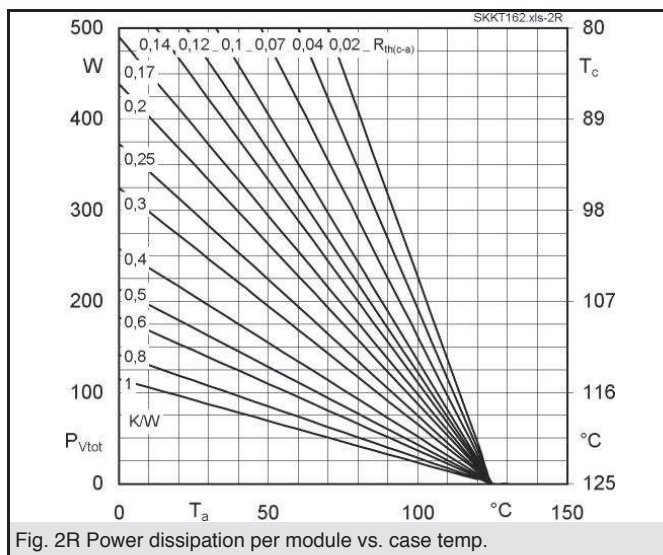
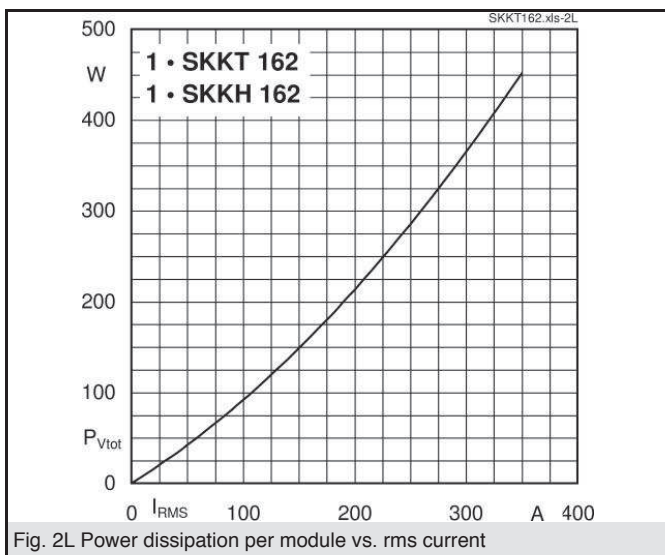
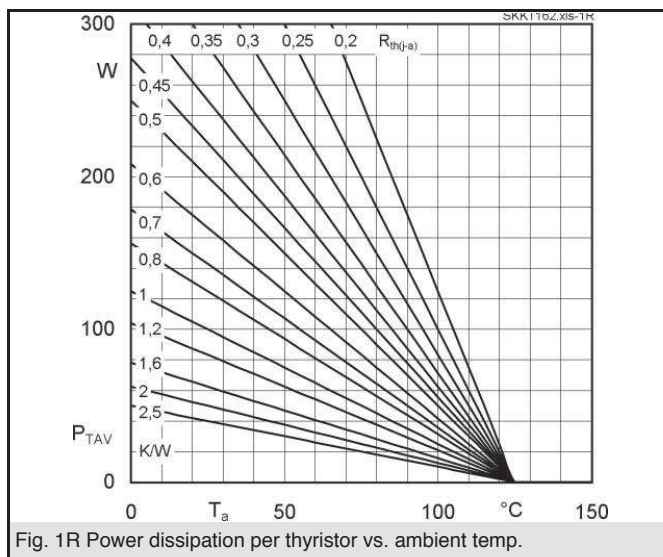
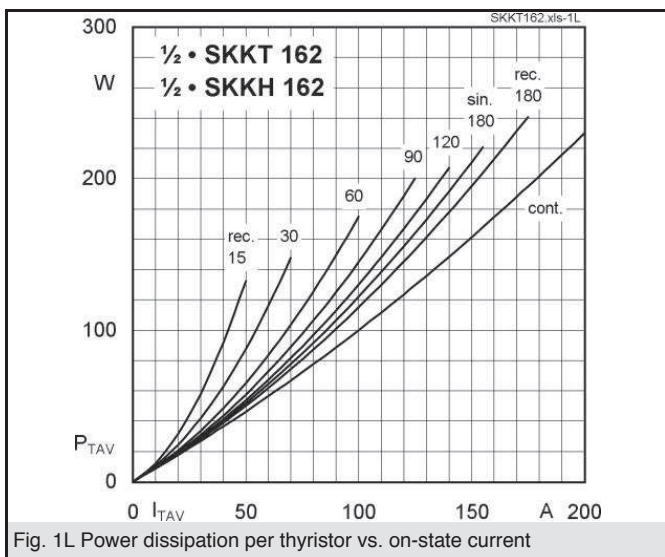


Symbol	IRMS=250A (maximum value for continuous operation) ITAV=160A (sin.180; Tc=83°C)						Units
	SKKT162/08E	SKKT162/12E	SKKT162/16E	SKKT162/18E	SKKH162/08E	SKKH162/18E	
VRRM,VDRM	800	1200	1600	1800	800	1800	V
VRSM	900	1300	1700	1900	900	1900	V

Electrical characteristics

Symbol	Conditions	Values	Units
ITAV	sin.180; Tc=85(100)°C;	156(110)	A
ID	P3/180F;Ta=35°C;B2/B6	190/230	A
	P3/200F;Ta=35°C;B2/B6	190/260	A
IRMS	P3/180F;Ta=35°C;W1/W3	265/3 *185	A
ITSM	Tvj=25°C; 10ms	5400	A
	Tvj=125°C; 10ms	5000	A
I²t	Tvj=25°C; 8.3...10ms	145000	A²s
	Tvj=130°C; 8.3...10ms	125000	A²s
VT	Tvj=25°C, IT=500A	max1.6	V
VT(TO)	Tvj=125°C	max.0.85	V
rT	Tvj=125°C	max.1.5	mΩ
IDD;IRD	Tvj=125°C, VRD=VRRM; VDD=VDRM	max.40	mA
tgd	Tvj=25°C;IG=1A;di/dt=1A/μs	1	μs
tgr	VD=0.67*VDRM	2	μs
(dv/dt)cr	Tvj=125°C	max.1000	V/μs
(di/dt)cr	Tvj=125°C	max.200	A/μs
tq	Tvj=125°C	50...150	μs
IH	Tvj=25°C;typ./max.	150/400	mA
IL	Tvj=25°C; RG=33Ω; typ./max.	300/1000	mA
VGT	Tvj=25°C;d.c	min.2	V
IGT	Tvj=25°C;d.c	min.150	mA
VGD	Tvj=125°C;d.c	max.0.25	V
IGD	Tvj=125°C;d.c	max.10	mA
Rth(j-c)	cont.per thyristor/per module	0.17/0.085	K/W
Rth(j-c)	sin.180;per thyristor/per module	0.18/0.09	K/W
Rth(j-c)	rec.120;per thyristor/per module	0.2/0.1	K/W
Rth(j-s)	per thyristor/per module	0.2/0.1	K/W
Tvj		-40...+125	°C
Tstg		-40...+125	°C
Visol	a.c.50Hz; r.m.s; 1s/1min.	3600/3000	V~
Ms	to heatsink	5±15%¹)	Nm
Mt	to terminals	5±15%	Nm
a		5*9.81	m/s²
m	approx.	165	g

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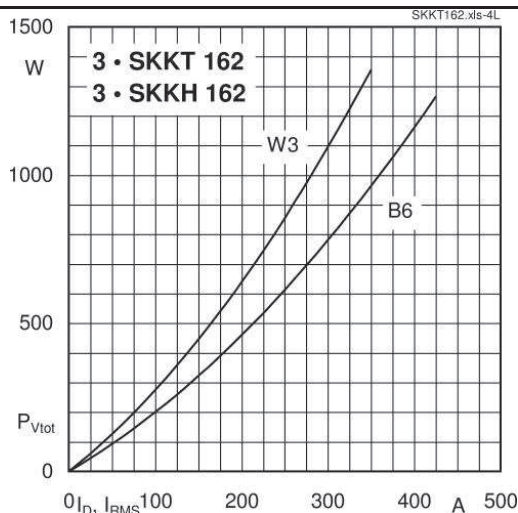


Fig. 4L Power dissipation of three modules vs. direct and rms current

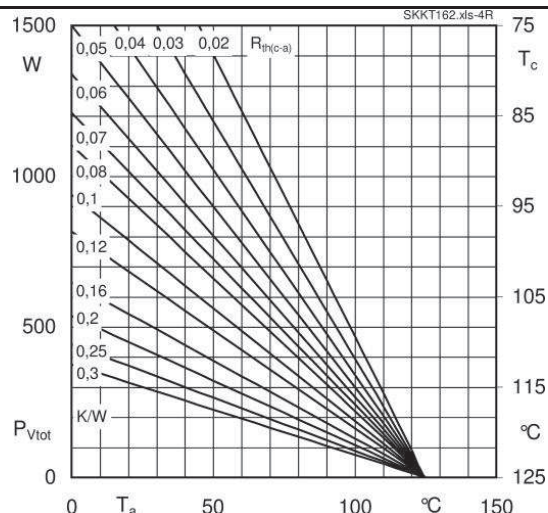


Fig. 4R Power dissipation of three modules vs. case temp.

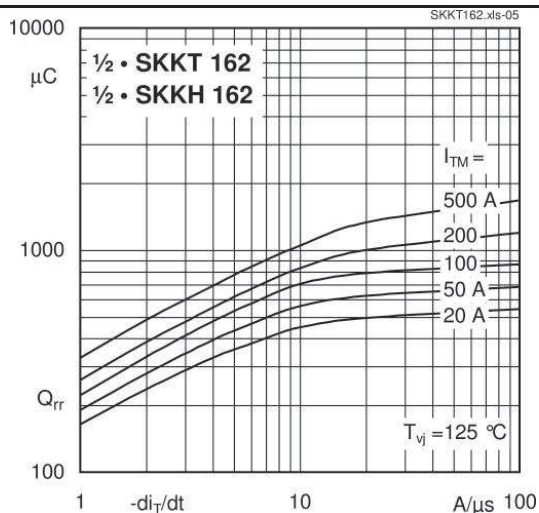


Fig. 5 Recovered charge vs. current decrease

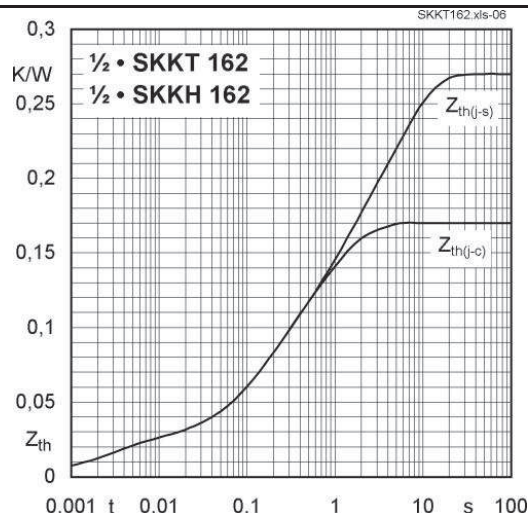


Fig. 6 Transient thermal impedance vs. time

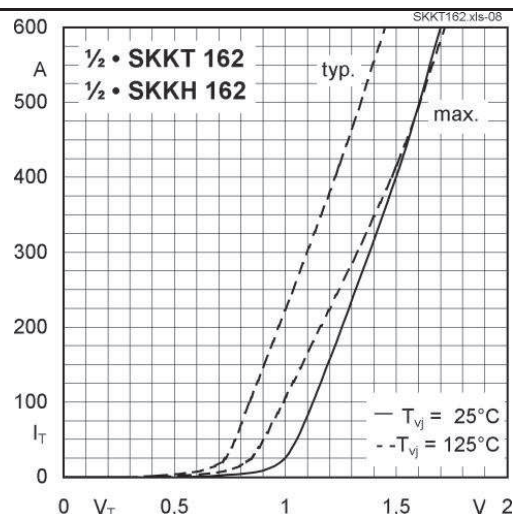


Fig. 7 On-state characteristics

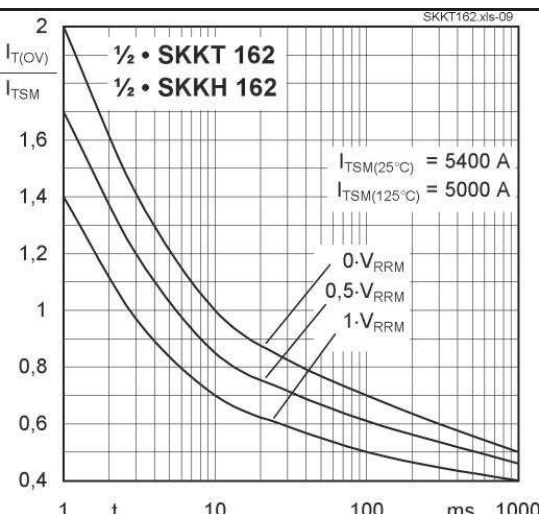


Fig. 8 Surge overload current vs. time

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