

SKKT57,SKKH57,SKKT57B

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

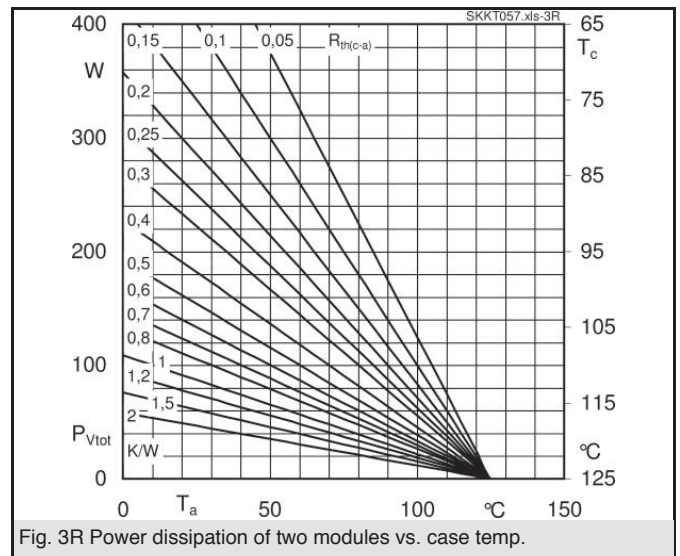
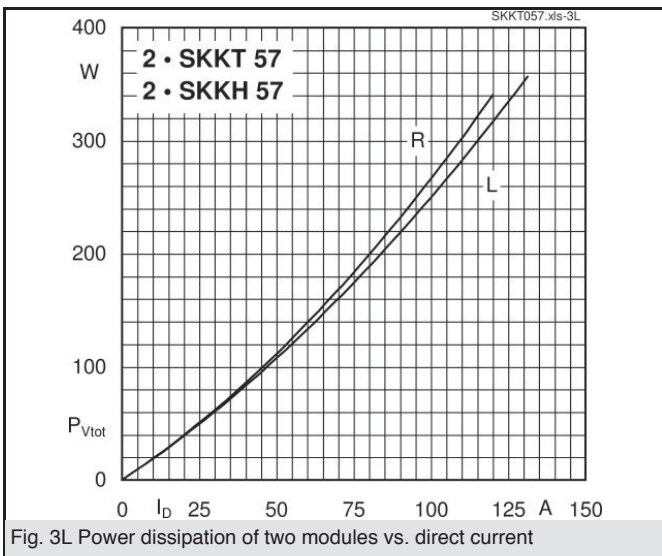
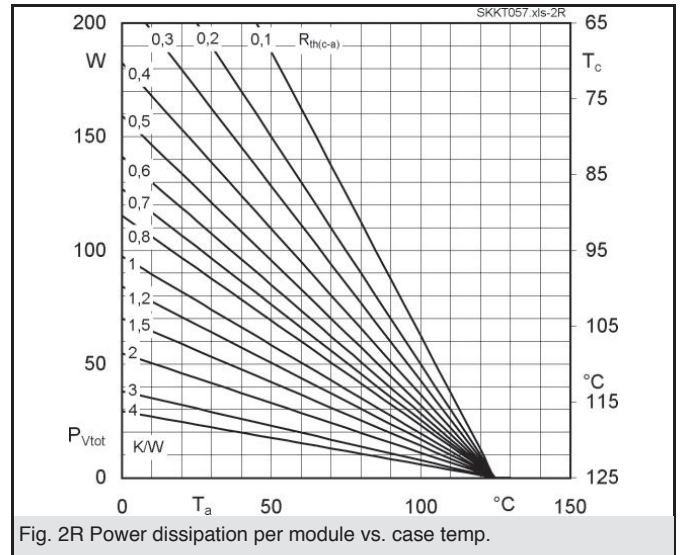
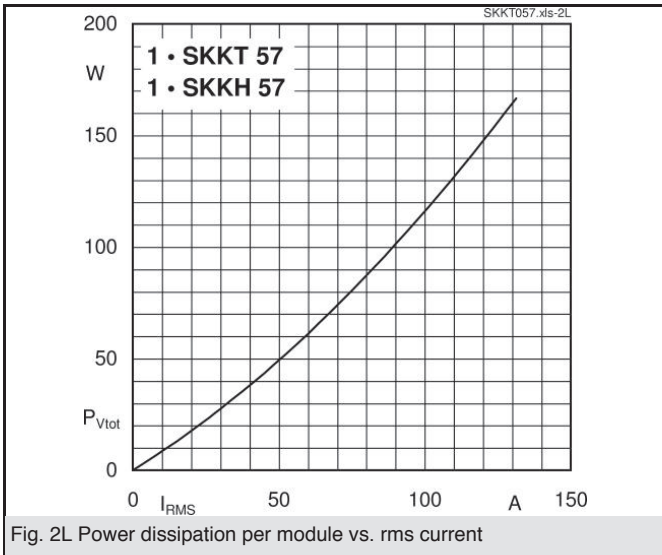
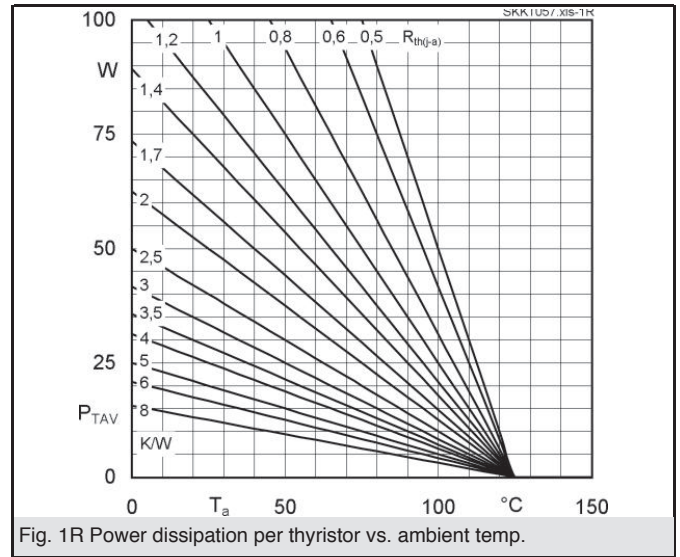
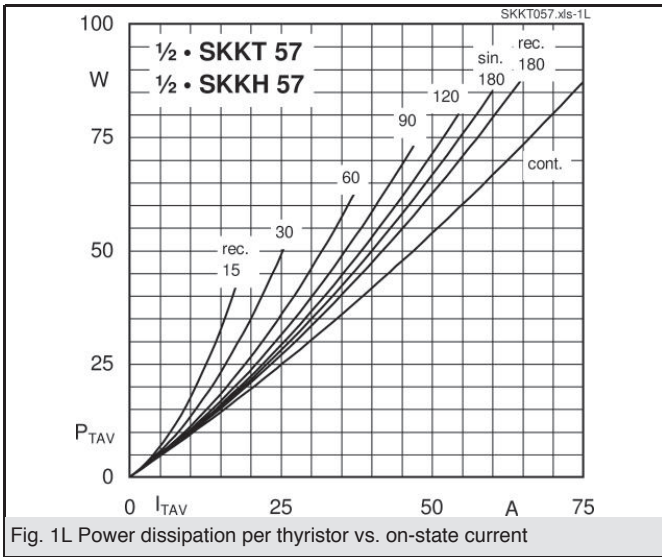


Symbol	IRMS=95A (maximum value for continuous operation) ITAV=55A (sin.180; Tc=80°C)					Units
	SKKT57/08E SKKH57/08E SKKT57B/08E	SKKT57/12E SKKH57/12E SKKT57B/12E	SKKT57/14E SKKH57/14E SKKT57B/14E	SKKT57/16E SKKH57/16E SKKT57B/16E	SKKT57/18E SKKH57/18E SKKT57B/18E	
VRRM,VDRM	800	1200	1400	1600	1800	V
VRSM	900	1300	1500	1700	1900	V

Electrical characteristics

Symbol	Conditions	Values	Units
ITAV	sin.180; Tc=85(100)°C;	50(35)	A
ID	P3/180;Ta=45°C;B2/B6	57/68	A
	P3/180F;Ta=35°C;B2/B6	100/130	A
IRMS	P3/180F;Ta=35°C;W1/W3	130/3 * 100	A
ITSM	Tvj=25°C; 10ms	1500	A
	Tvj=125°C; 10ms	1250	A
I²t	Tvj=25°C; 8.3...10ms	11000	A²s
	Tvj=125°C; 8.3...10ms	8000	A²s
VT	Tvj=25°C, IT=200A	max1.65	V
VT(TO)	Tvj=125°C	max.0.9	V
rT	Tvj=125°C	max.3.5	mΩ
IDD;IRD	Tvj=125°C, VRD=VRRM; VDD=VDRM	max.15	mA
tgd	Tvj=25°C;IG=1A;die/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.150	A/μs
tq	Tvj=125°C	80	μs
IH	Tvj=25°C;typ./max.	150/250	mA
IL	Tvj=25°C; RG=33Ω; typ./max.	300/600	mA
VGT	Tvj=25°C;d.c	min.3	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.6	mA
Rth(j-c)	cont.per thyristor/per module	0.57/0.29	K/W
Rth(j-c)	sin.180;per thyristor/per module	0.6/0.3	K/W
Rth(j-c)	rec.120;per thyristor/per module	0.64/0.32	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	3±15%	Nm
a		5*9.81	m/s²
m	approx.	95	g

SKKT57,SKKH57,SKKT57B



SKKT57,SKKH57,SKKT57B

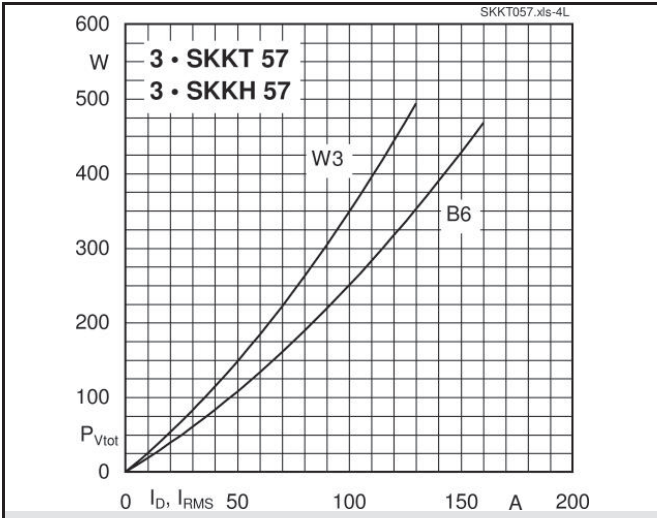


Fig. 4L Power dissipation of three modules vs. direct and rms current

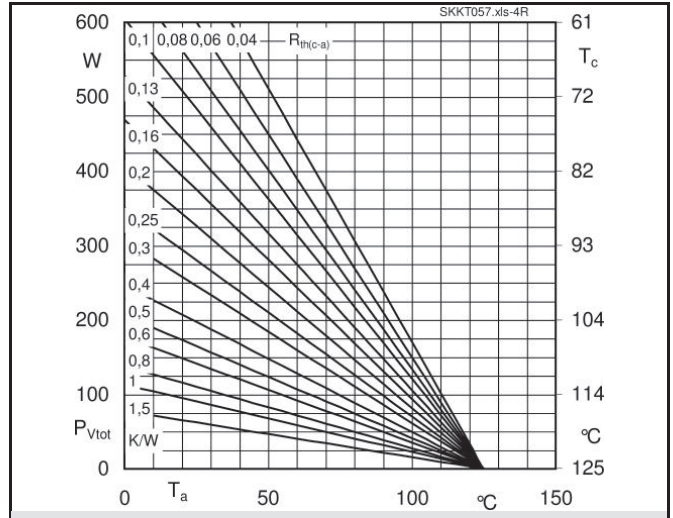


Fig. 4R Power dissipation of three modules vs. case temp.

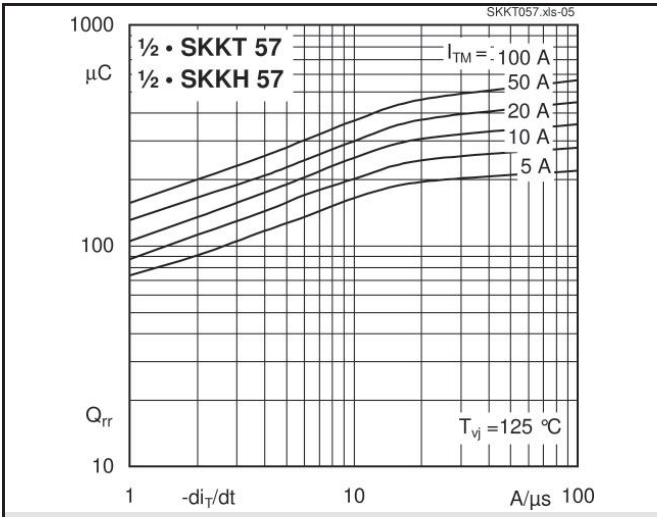


Fig. 5 Recovered charge vs. current decrease

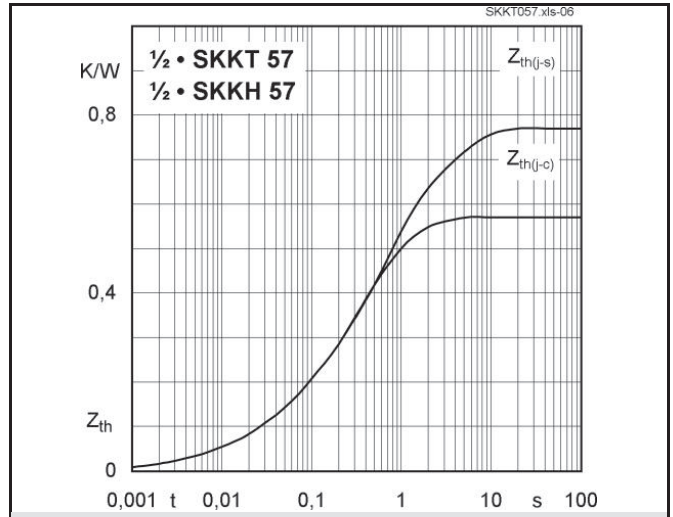


Fig. 6 Transient thermal impedance vs. time

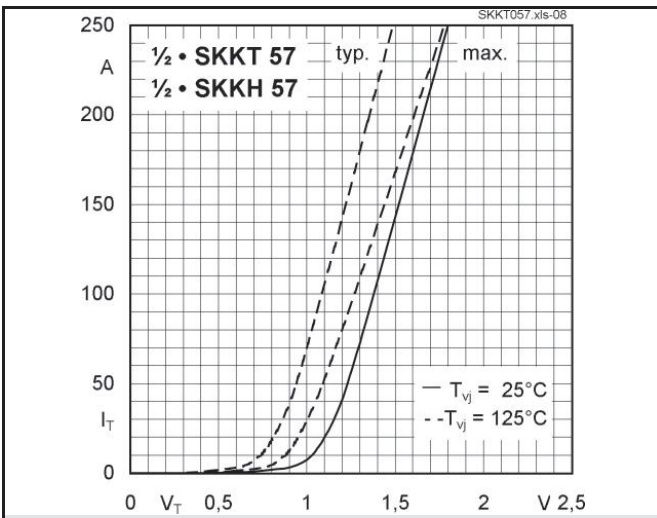


Fig. 7 On-state characteristics

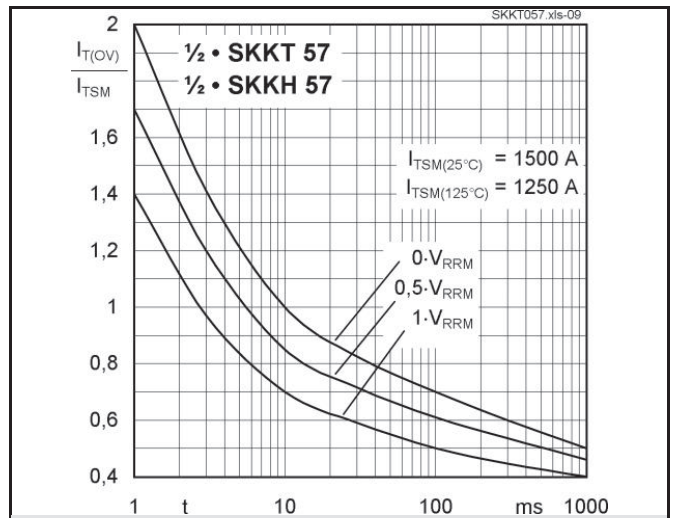


Fig. 8 Surge overload current vs. time

SKKT57,SKKH57,SKKT57B

