

SKKT 72, SKKH 72, SKKT 72B



SEMIPACK® 1

Thyristor / Diode Modules

SKKT 72

SKKH 72

SKKT 72B

Features

- Heat transfer through aluminium oxide ceramic isolated metal baseplate
- Hard soldered joints for high reliability
- UL recognized, file no. E 63 532

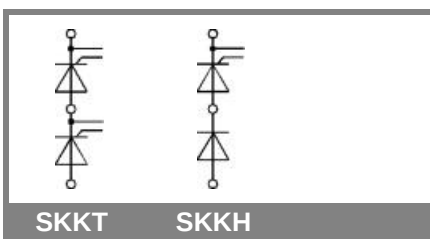
Typical Applications

- DC motor control (e. g. for machine tools)
- AC motor soft starters
- Temperature control (e. g. for ovens, chemical processes)
- Professional light dimming (studios, theaters)

1) See the assembly instructions

V_{RSM} V	V_{RRM}, V_{DRM} V	$I_{TRMS} = 125$ A (maximum value for continuous operation) $I_{TAV} = 70$ A (sin. 180; $T_c = 85$ °C)		
900	800	SKKT 72/08E	SKKT 72B08E	SKKH 72/08E
1300	1200	SKKT 72/12E	SKKT 72B12E	SKKH 72/12E
1500	1400	SKKT 72/14E	SKKT 72B14E	SKKH 72/14E
1700	1600	SKKT 72/16E	SKKT 72B16E	SKKH 72/16E
1900	1800	SKKT 72/18E	SKKT 72B18E	SKKH 72/18E
2100	2000	SKKT 72/20EH4		SKKH 72/20EH4
2300	2200	SKKT 72/22EH4		SKKH 72/22EH4

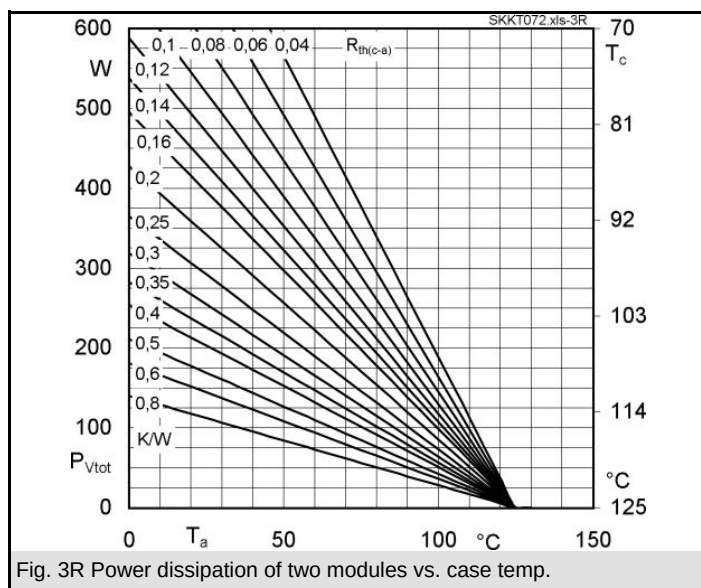
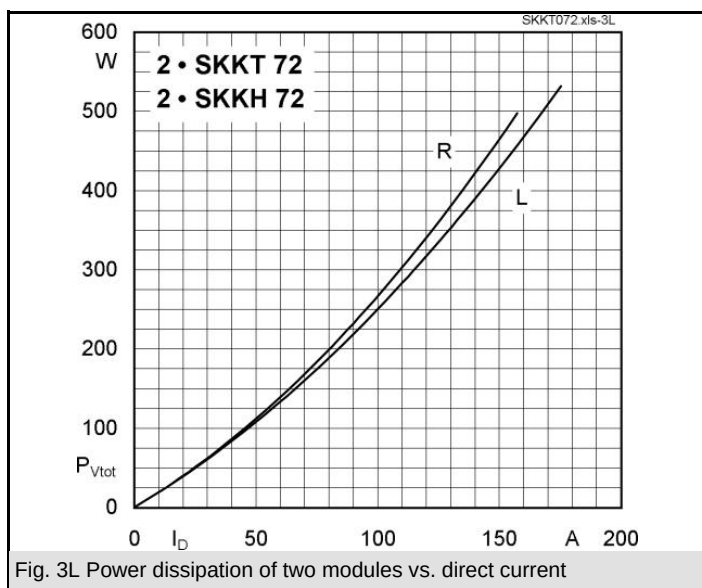
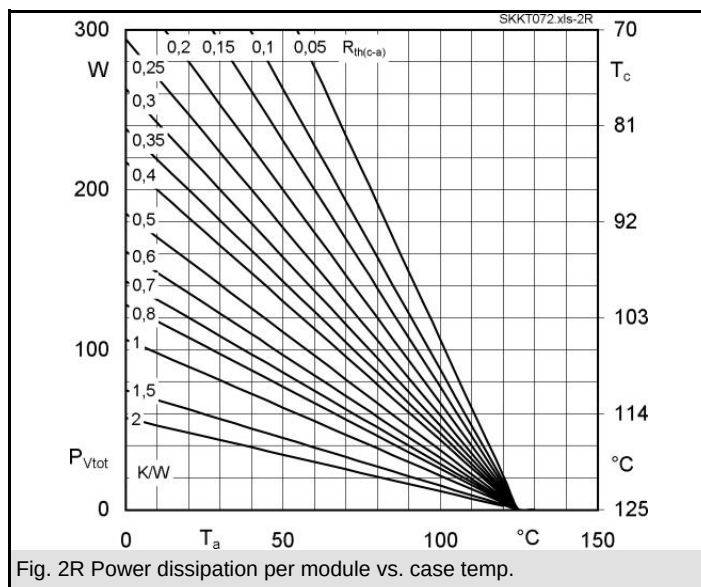
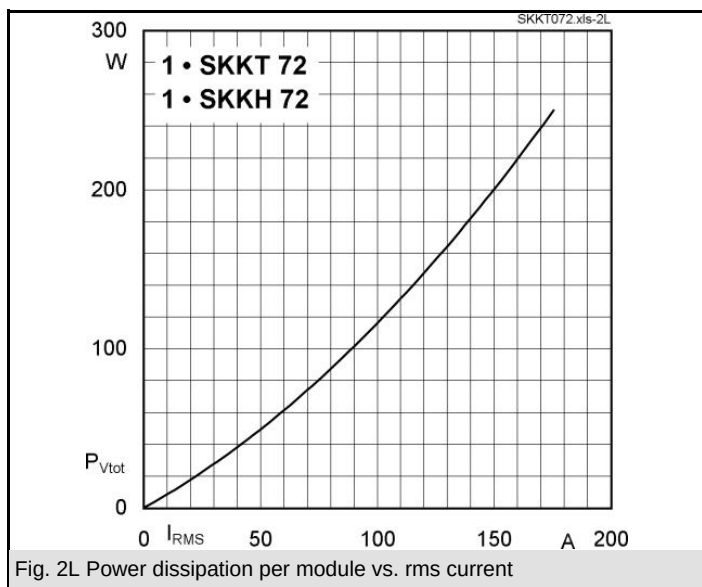
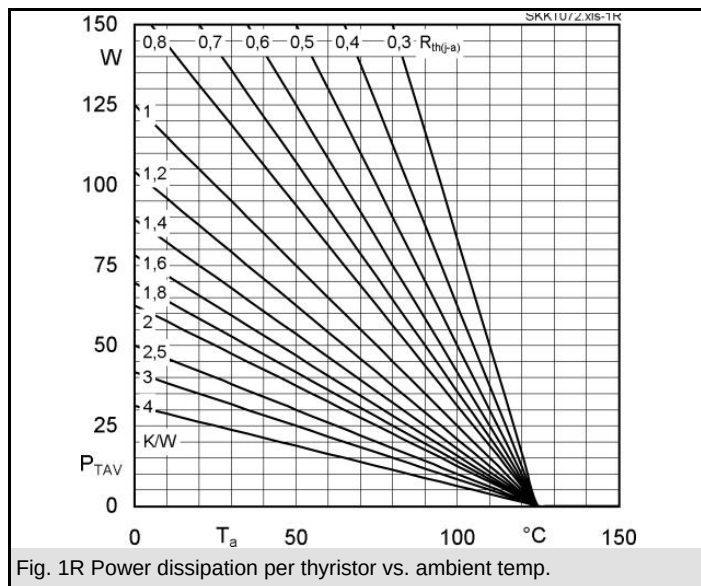
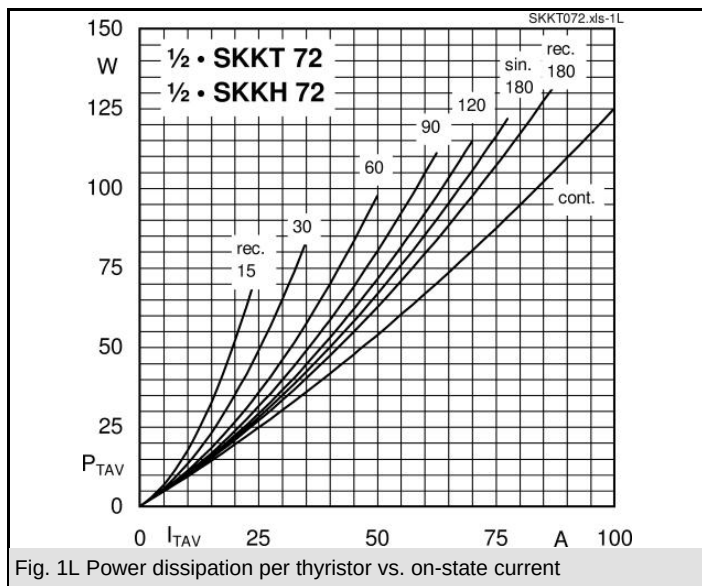
Symbol	Conditions	Values	Units
I_{TAV}	sin. 180; $T_c = 85$ (100) °C	70 (50)	A
I_D	P3/180; $T_a = 45$ °C; B2 / B6	62 / 75	A
	P3/180F; $T_a = 35$ °C; B2 / B6	115 / 145	A
I_{RMS}	P3/180F; $T_a = 35$ °C; W1 / W3	155 / 3 * 115	A
I_{TSM}	$T_{vj} = 25$ °C; 10 ms	1600	A
	$T_{vj} = 125$ °C; 10 ms	1450	A
i^2t	$T_{vj} = 25$ °C; 8,3 ... 10 ms	13000	A²s
	$T_{vj} = 125$ °C; 8,3 ... 10 ms	10500	A²s
V_T	$T_{vj} = 25$ °C; $I_T = 300$ A	max. 1,9	V
$V_{T(TO)}$	$T_{vj} = 125$ °C	0,9	V
r_T	$T_{vj} = 125$ °C	3,5	mΩ
I_{DD}, I_{RD}	$T_{vj} = 125$ °C; $V_{RD} = V_{RRM}, V_{DD} = V_{DRM}$	max. 20	mA
I_{DD}, I_{RD}	for SKK .../20E; SKK .../22E	max. 30	mA
t_{gd}	$T_{vj} = 25$ °C; $I_G = 1$ A; $di_G/dt = 1$ A/μs	1	μs
t_{gr}	$V_D = 0,67 * V_{DRM}$	1	μs
$(di/dt)_{cr}$	$T_{vj} = 125$ °C	max. 150	A/μs
$(dv/dt)_{cr}$	$T_{vj} = 125$ °C	max. 1000	V/μs
t_q	$T_{vj} = 125$ °C	80	μs
I_H	$T_{vj} = 25$ °C; typ. / max.	150 / 250	mA
I_L	$T_{vj} = 25$ °C; $R_G = 33$ Ω; typ. / max.	300 / 600	mA
V_{GT}	$T_{vj} = 25$ °C; d.c.	min. 3	V
I_{GT}	$T_{vj} = 25$ °C; d.c.	min. 150	mA
V_{GD}	$T_{vj} = 125$ °C; d.c.	max. 0,25	V
I_{GD}	$T_{vj} = 125$ °C; d.c.	max. 6	mA
$R_{th(j-c)}$	cont.; per thyristor / per module	0,35 / 0,18	K/W
$R_{th(j-c)}$	sin. 180; per thyristor / per module	0,37 / 0,19	K/W
$R_{th(j-c)}$	rec. 120; per thyristor / per module	0,39 / 0,2	K/W
$R_{th(c-s)}$	per thyristor / per module	0,2 / 0,1	K/W
T_{vj}		- 40 ... + 125	°C
T_{stg}		- 40 ... + 125	°C
V_{isol}	a. c. 50 Hz; r.m.s.; 1 s / 1 min.	3600 / 3000	V~
V_{isol}	a. c. 50 Hz; r.m.s.; 1 s / 1 min. for SKK...H4	4800 / 4000	V~
M_s	to heatsink	5 ± 15 % ¹⁾	Nm
M_t	to terminals	3 ± 15 %	Nm
a		5 * 9,81	m/s²
m	approx.	95	g
Case	SKKT	A 46	
	SKKT ...B	A 48	
	SKKH	A 47	



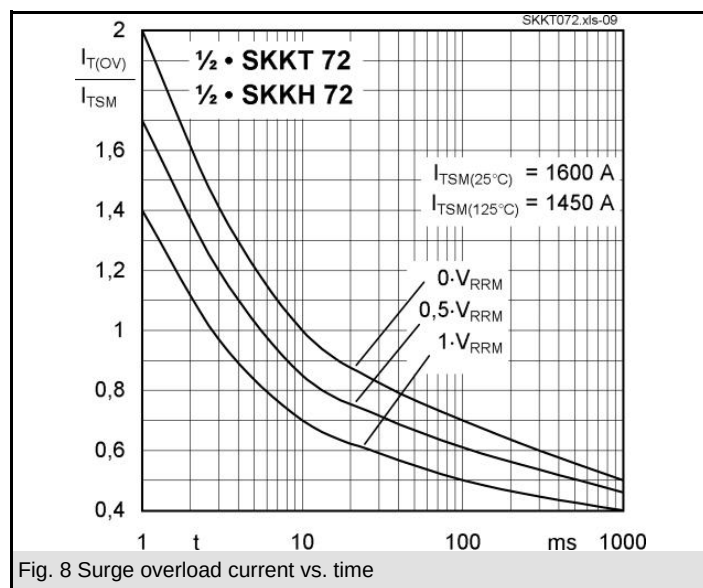
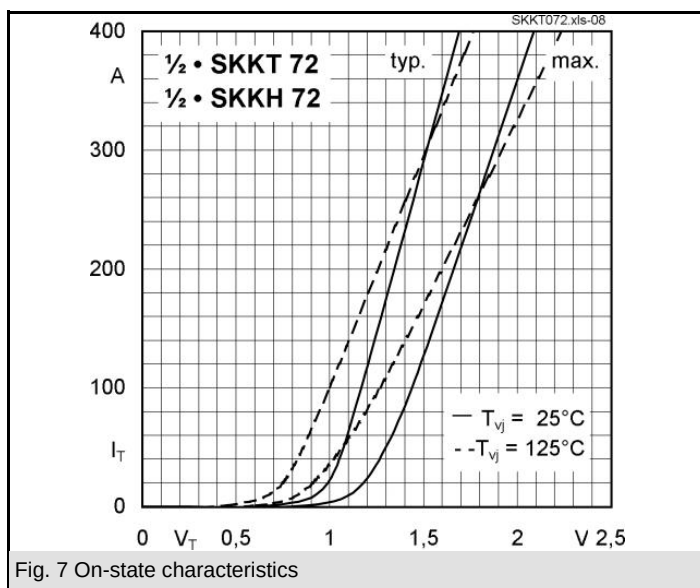
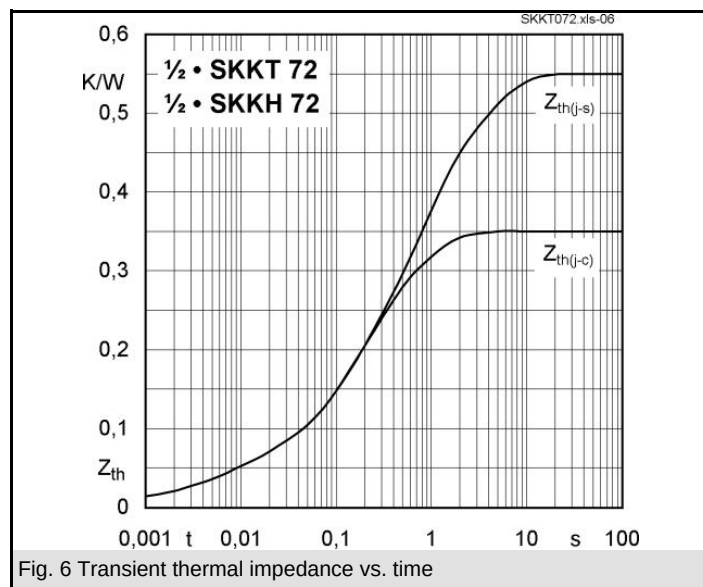
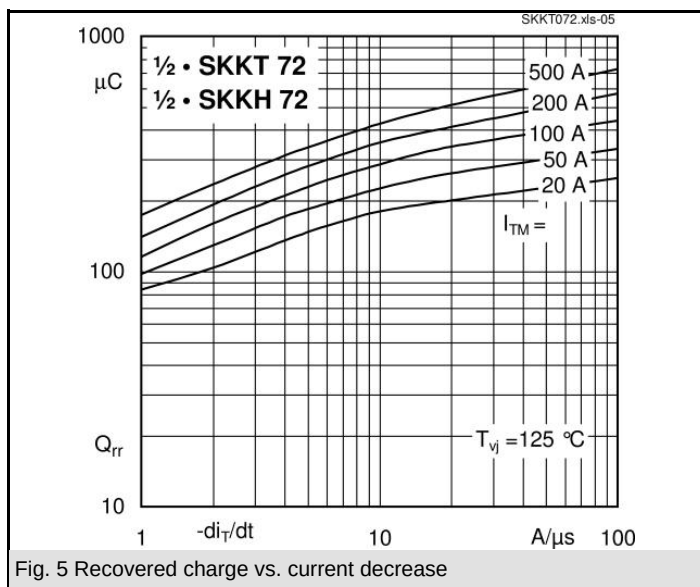
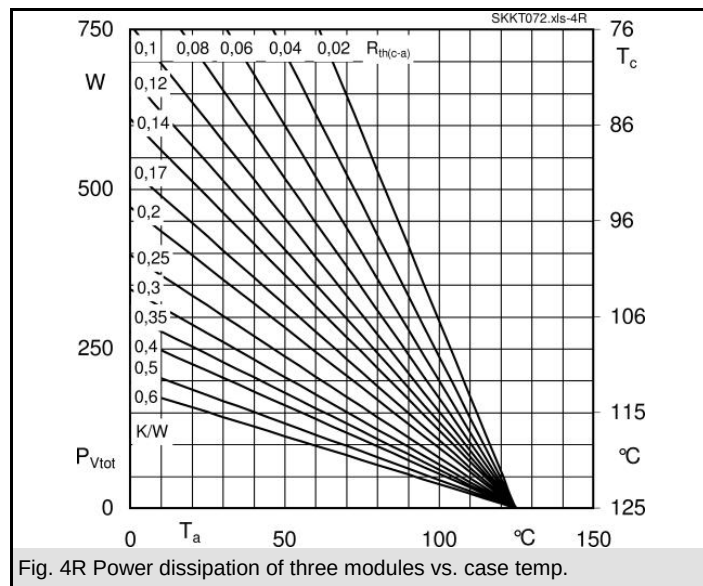
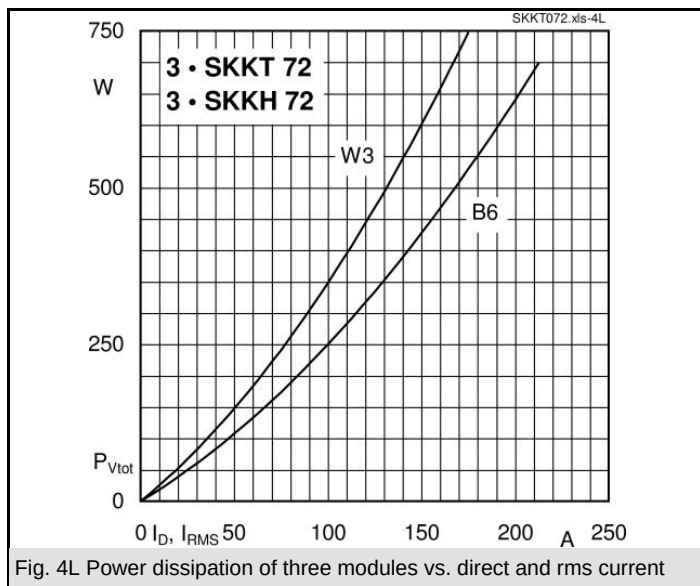
SKKT

SKKH

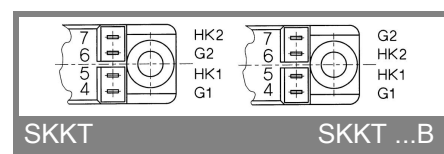
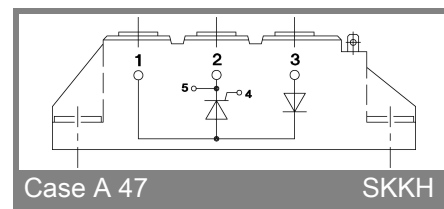
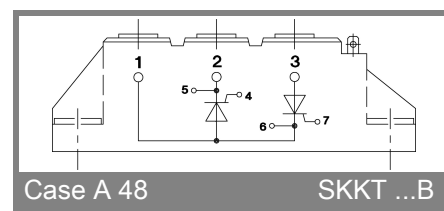
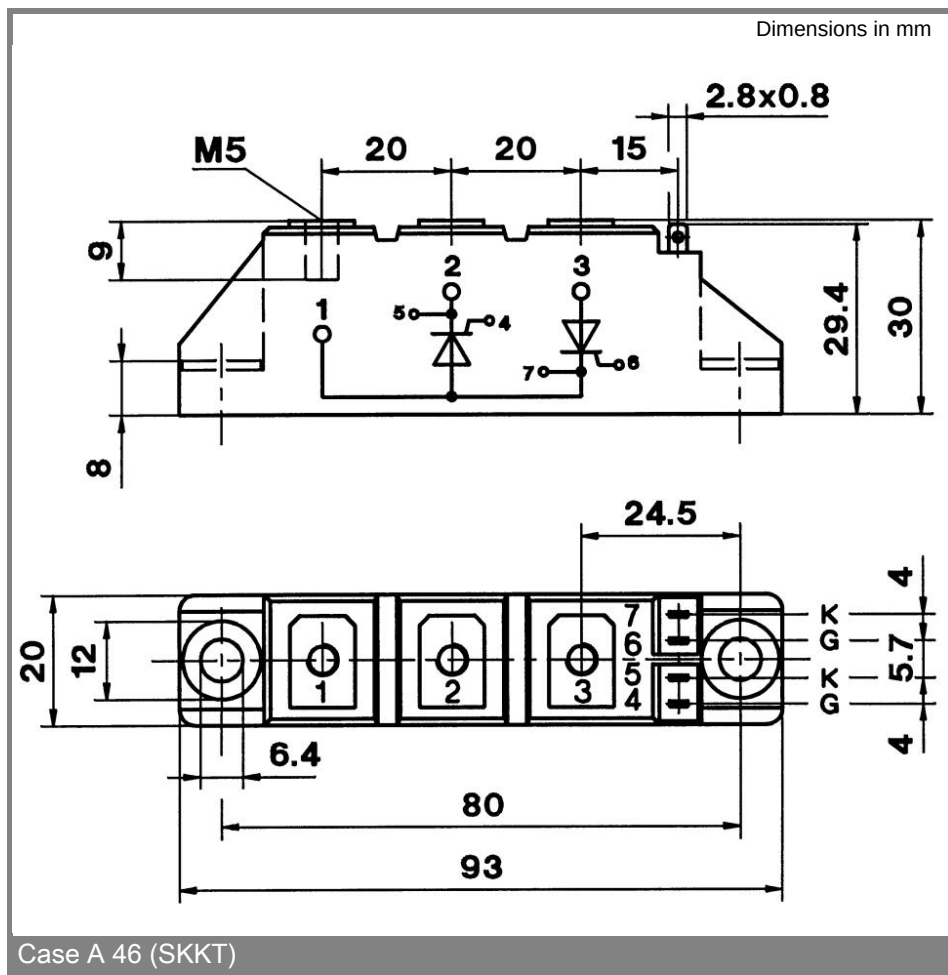
SKKT 72, SKKH 72, SKKT 72B



SKKT 72, SKKH 72, SKKT 72B



SKKT 72, SKKH 72, SKKT 72B



This technical information specifies semiconductor devices but promises no characteristics. No warranty or guarantee expressed or implied is made regarding delivery, performance or suitability.