

Features

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

Typical applications

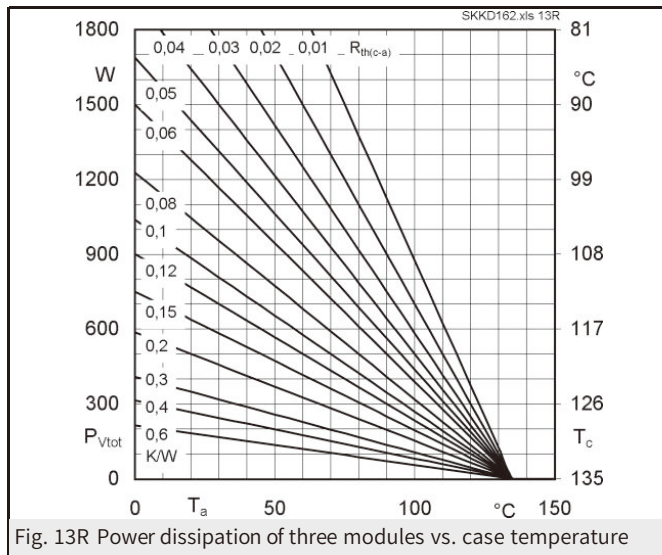
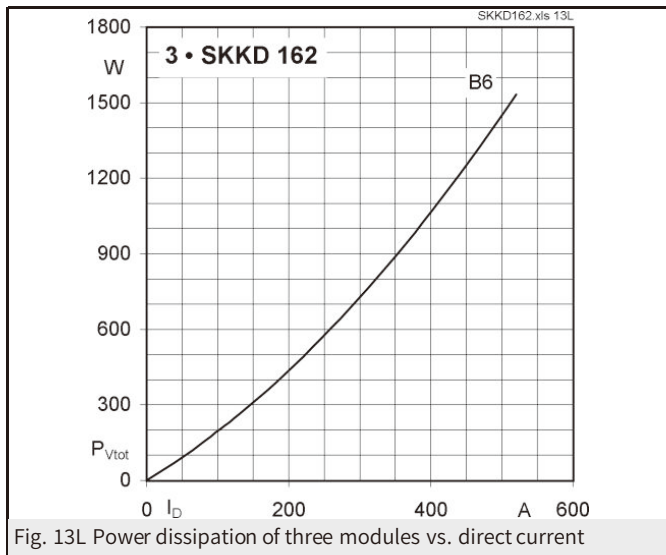
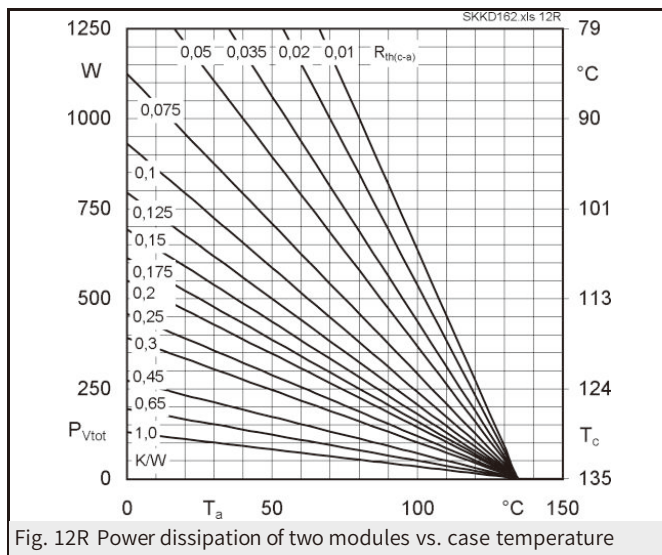
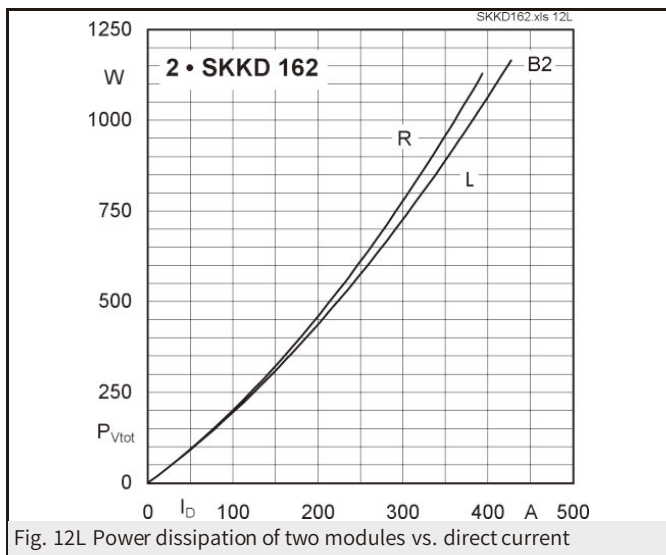
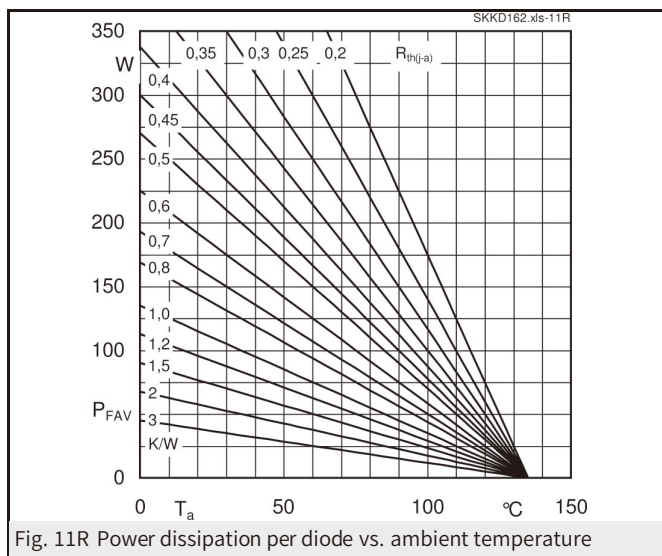
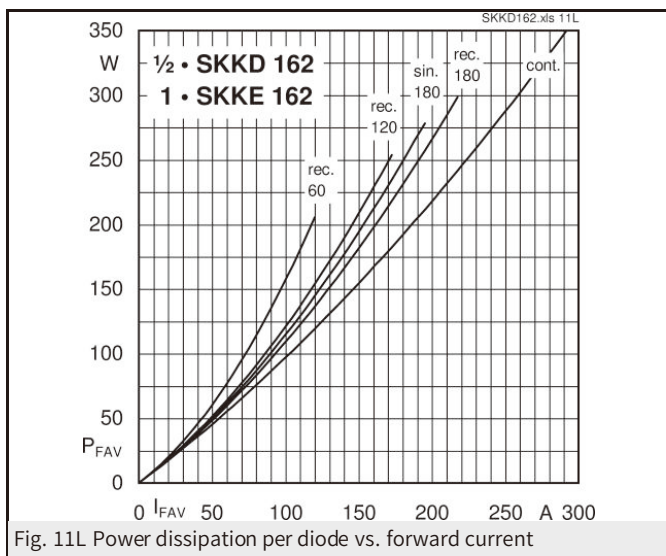
- Non-controllable rectifiers for AC/DC converters
- Line rectifiers for transistorized AC motor controllers
- Field supply for DC motors
- Free-wheeling diodes



Symbol	$I_{FRMS} = 140A$ (maximum value for continuous operation)				$I_{FAV} = 80A$ (sin.180; $T_c = 87^\circ C$)			Units
	SKKD162/08 SKKE162/08	SKKD162/12 SKKE162/12	SKKD162/14 SKKE162/14	SKKD162/16 SKKE162/16	SKKD162/18 SKKE162/18	SKKD162/20H4	SKKD162/22H4	
V_{RRM}, V_{DRM}	800	1200	1400	1600	1800	2000	2200	V
V_{RSM}	900	1300	1500	1700	1900	2100	2300	V

Electrical characteristics

Symbol	Conditions	Values	Units
I_{FAV}	sin.180 ; $T_c = 85(100)^\circ C$;	195(150)	A
I_D	P3/180; $T_a = 45^\circ C$; B2/B6	90/115	A
	P3/180F; $T_a = 35^\circ C$; B2/B6	210/260	A
I_{FSM}	$T_{vj} = 25^\circ C$; 10ms	6000	A
	$T_{vj} = 125^\circ C$; 10ms	5000	A
I^2t	$T_{vj} = 25^\circ C$; 8.3...10ms	180000	A^2s
	$T_{vj} = 125^\circ C$; 8.3...10ms	125000	A^2s
V_F	$T_{vj} = 25^\circ C$, $I_F = 500A$	max.1.5	V
$V_{(TO)}$	$T_{vj} = 135^\circ C$	max.0.85	V
r_T	$T_{vj} = 135^\circ C$	max.1.2	$m\Omega$
I_{RD}	$T_{vj} = 135^\circ C$, $V_{RD} = V_{RRM}$	max.9	mA
$R_{th(j-c)}$	per diode/ per module	0.18/0.09	K/W
$R_{th(c-s)}$	per diode/ per module	0.1/0.05	K/W
T_{vj}		-40...+135	$^\circ C$
T_{stg}		-40...+135	$^\circ C$
V_{isol}	a.c.50Hz; r.m.s; 1s/1min.	3600/3000	V~
V_{isol}	a.c.50Hz; r.m.s; 1s/1min. for SKK...H4	4800/4000	V~
M_s	to heatsink	$5 \pm 15\%$	Nm
M_t	to terminals	$5 \pm 15\%$	Nm
a		5×9.81	m/s^2
m	approx.	165	g



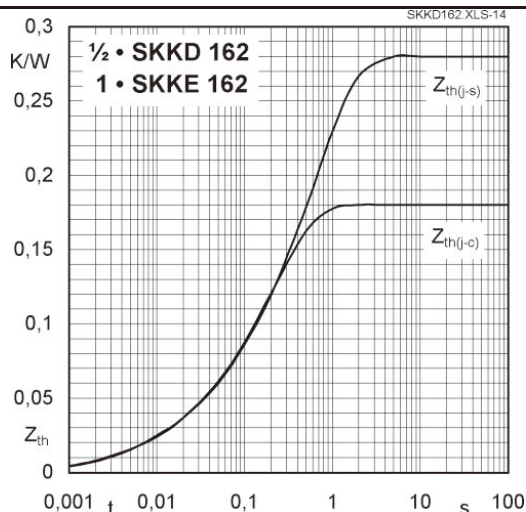


Fig. 14 Transient thermal impedance vs. time

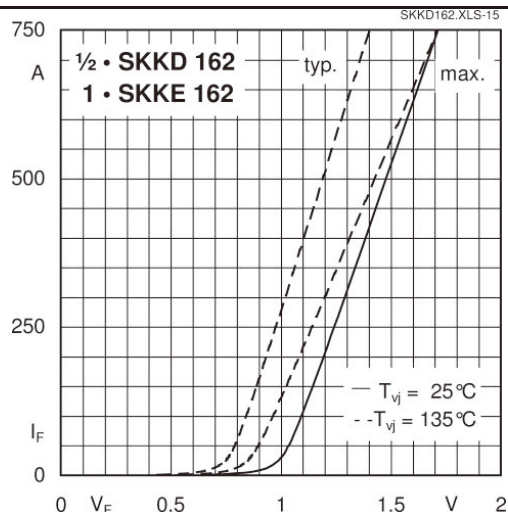


Fig. 15 Forward characteristics

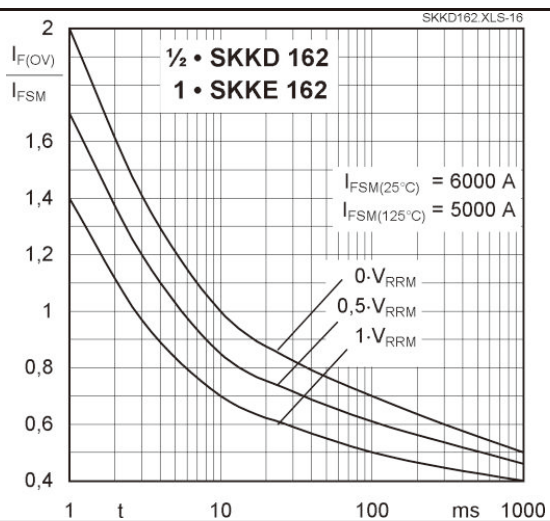
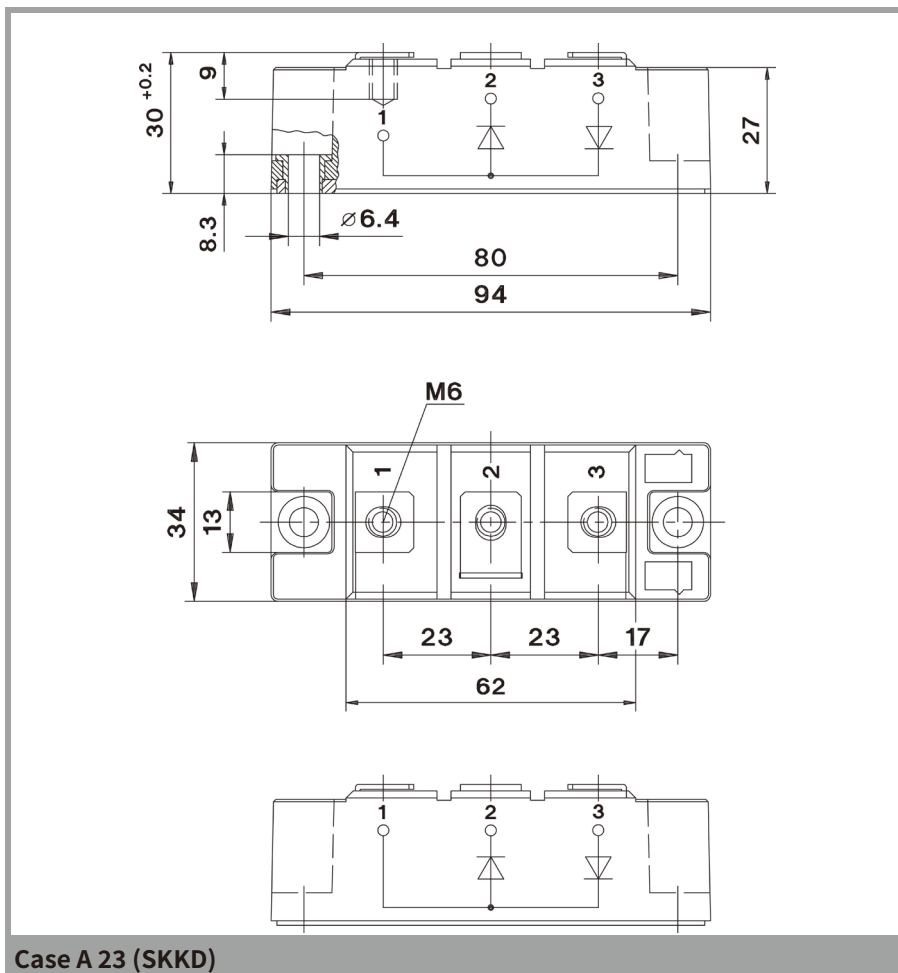


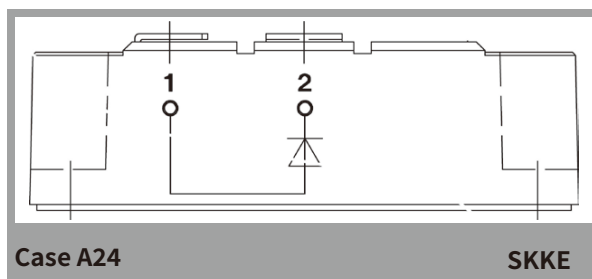
Fig. 16 Surge overload current vs. time

Dimensions in mm

04



Case A 23 (SKKD)



Case A24

SKKE