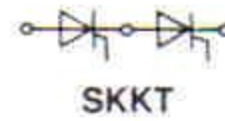


SEMIPACK[®] 1 Thyristor/ Diode Modules

SKKT 71 SKKH 71
SKKT 91 SKKH 91



Features

- Heat transfer through 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)
- Temperature control (e. g. for ovens, chemical processes)
- Professional light dimming (studios, theaters)

I_{TAVM} (dV/dt / V_{DRM} dt) _{cr}		I_{TRMS} (maximum values for continuous operation)			
		125 A	150 A	125 A	150 A
		I_{TAV} (sin. 180; $T_{case} = \dots$)			
V	V/ μ s	80 A (78 °C)	95 A (85 °C)	80 A (78 °C)	95 A (85 °C)
400	500	–	SKKT 91/04 D	SKKH 71/04 D	SKKH 91/04 D
600	500	SKKT 71/06 D	SKKT 91/06 D	SKKH 71/06 D	SKKH 91/06 D
800	500	SKKT 71/08 D	SKKT 91/08 D	SKKH 71/08 D	SKKH 91/08 D
1200	500	SKKT 71/12 D	SKKT 91/12 D	SKKH 71/12 D	SKKH 91/12 D
	1000	SKKT 71/12 E	SKKT 91/12 E	–	–
1400	1000	SKKT 71/14 E	SKKT 91/14 E	SKKH 71/14 E	SKKH 91/14 E
1600	1000	SKKT 71/16 E	SKKT 91/16 E	SKKH 71/16 E	SKKH 91/16 E
1800	1000	SKKT 71/18 E	–	SKKH 71/18 E	–
2000	1000	SKKT 71/20 E	–	SKKH 71/20 E	–

Symbol : Conditions		SKKT 71 SKKH 71	SKKT 91 SKKH 91
I_{TAV}	sin. 180; ($T_{case} = \dots$)	80 A (78 °C) 70 A (85 °C)	95 A (85 °C) –
I_{TAVM}	B2/B6 $T_{amb} = 35 °C$; P 3/180 F	115 A/150 A	140 A/175 A
I_{TAVM}	W1/W3 $T_{amb} = 35 °C$; P 3/180 F	155 A/3x115 A	195 A/3x140 A
I_{TSM}	$T_{vj} = 25 °C$	1600 A	2000 A
	$T_{vj} = 125 °C$	1450 A	1750 A
	$T_{vj} = 25 °C$	13000 A ² s	20000 A ² s
	$T_{vj} = 125 °C$	10500 A ² s	15000 A ² s
t_{tr}	$T_{vj} = 25 °C$; $I_G = 1 A$; $di_G/dt = 1 A/\mu s$		1 μs
t_{tr}	$V_D = 0,67 \cdot V_{DRM}$		2 μs
dI/dt	$T_{vj} = 125 °C$	typ. 100 A/ μs	typ. 100 A/ μs
	$T_{vj} = 125 °C$	typ. 80 μs	typ. 100 μs
	$T_{vj} = 25 °C$	typ. 150 mA; max. 250 mA	
	$T_{vj} = 25 °C$; $R_G = 33 \Omega$	typ. 300 mA; max. 600 mA	
V_{T0}	$T_{vj} = 25 °C$; $I_T = 300 A$	max. 1,9 V	max. 1,65 V
V_{T0}	$T_{vj} = 125 °C$	0,9 V	0,9 V
$r_{th(j-c)}$	$T_{vj} = 125 °C$	3,5 m Ω	2 m Ω
I_{TSM}	$T_{vj} = 125 °C$; $V_{DD} = V_{DRM}$; $V_{AD} = V_{RRM}$	max. 20 mA	max. 20 mA
V_{RRM}	$T_{vj} = 25 °C$; d. c.		3 V
V_{DRM}	$T_{vj} = 25 °C$; d. c.		150 mA
V_{AD}	$T_{vj} = 125 °C$; d. c.		0,25 V
I_{TSM}	$T_{vj} = 125 °C$; d. c.		6 mA
$R_{th(j-c)}$	cont.	per thyristor/per module (°C/W)	0,35/0,18
	sin. 180		0,37/0,19
	rec. 120		0,39/0,20
T_{vj}			0,2/0,1 °C/W
T_{vj}			–40 ... +125 °C
T_{vj}			–40 ... +125 °C
V_{RRM}	a. c. 50 Hz; r. m. s.; 1 s/1 min		3000 V ~ /2500 V ~ ¹⁾
M	Case to heatsink	SI units/ US units	5 Nm/44 lb. in. $\pm 15\%$ ²⁾
	Busbars to terminals		3 Nm/26 lb. in. $\pm 15\%$
a			5 · 9,81 m/s ²
m	approx.		120 g
Case	-- page B 1 – 85	A 5 (SKKT 71) A 6 (SKKH 71)	A 5 (SKKT 91) A 6 (SKKH 91)

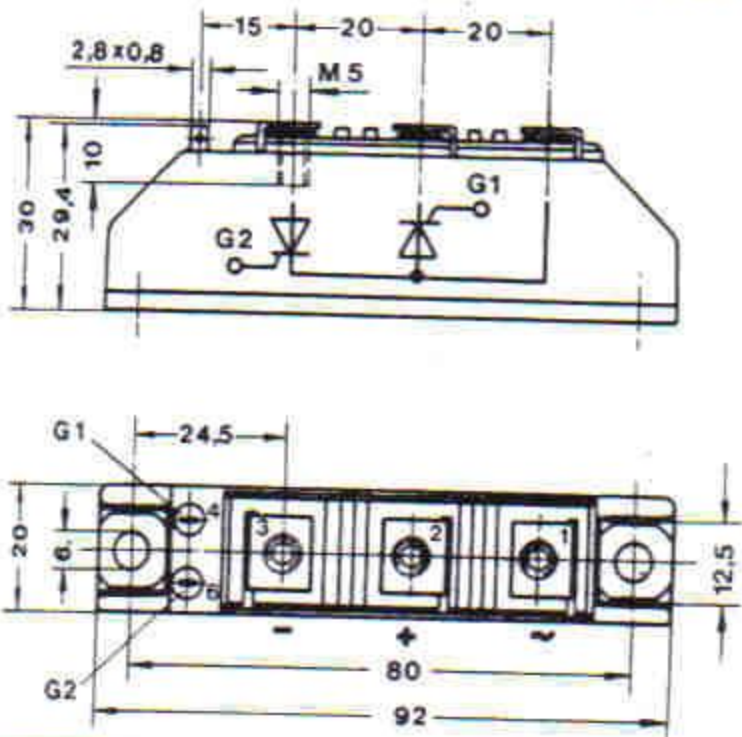
SKKT 19... 105

Case A 5

IEC 192-2: A 77 A
JEDEC: TO-240 AA

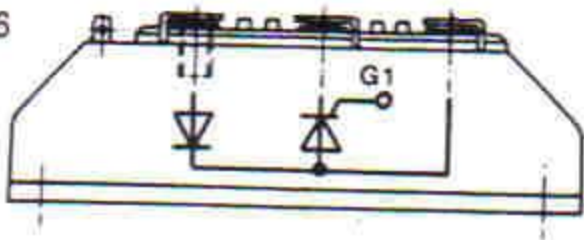
SEMIPACK® 1

UL recognized, file no. E 63 532



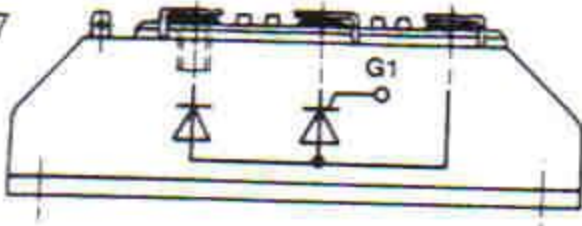
SKKH 26... 105

Case A 6



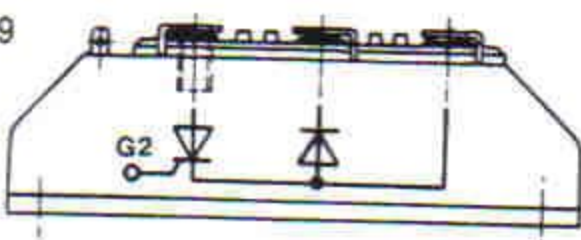
SKNH 19... 56

Case A 7



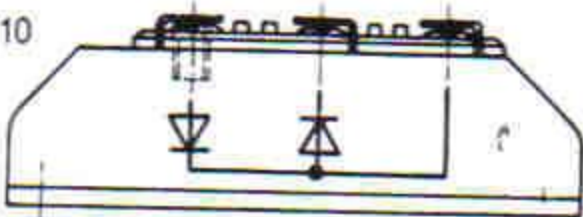
SKKL 56... 91

Case A 9



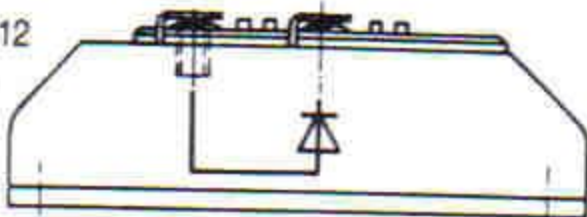
SKKD 26... 100

Case A 10



SKKE 81

Case A 12

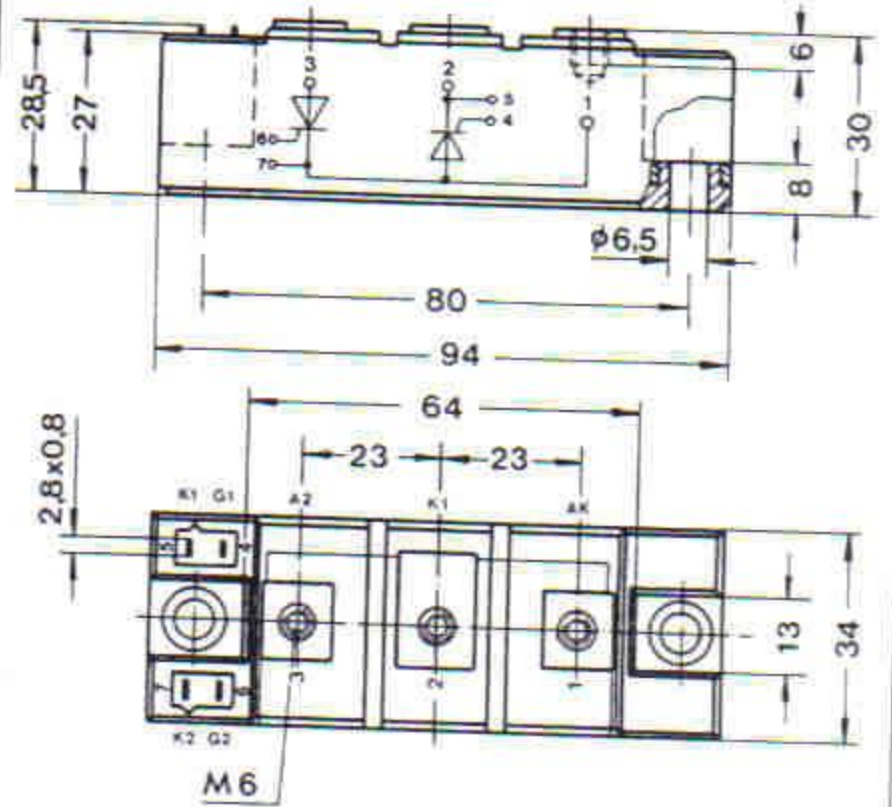


SKKT 132, SKKT 162

Case A 21

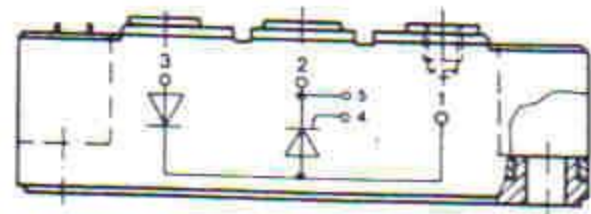
SEMIPACK® 2

UL recognized, file no. E 63 532



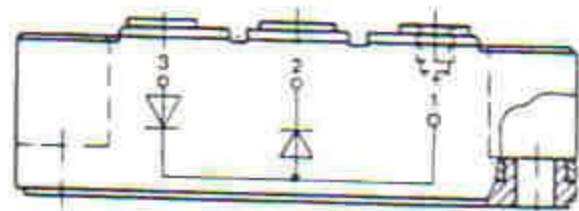
SKKH 132

Case A 22



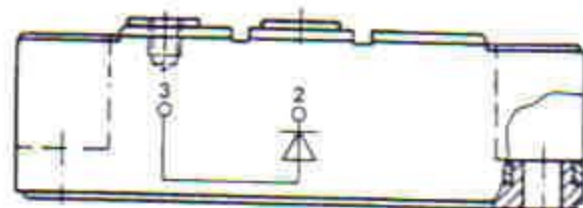
SKKD 162

Case A 23



SKKE 162

Case A 24



Dimensions in mm