Thyristor Modules
Thyristor/Diode Modules

PSKT 95
PSKH 95

I_{TRMS} = 2x 180 A
I_{TAVM} = 2x 116 A
V_{RRM} = 800-1800 V

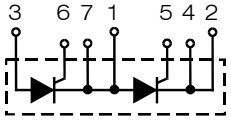
Preliminary Data Sheet

V_{RSM} V_{DSM}	V_{RRM} V_{DRM}	Type			
V	V	Version 1		Version 8	
900	800	PSKT 95/08io1	--	PSKT 95/08io8	PSKH 95/08io8
1300	1200	PSKT 95/12io1	PSKH 95-12io1	PSKT 95/12io8	PSKH 95/12io8
1500	1400	PSKT 95/14io1	--	PSKT 95/14io8	PSKH 95/14io8
1700	1600	PSKT 95/16io1	PSKH 95-16io1	PSKT 95/16io8	PSKH 95/16io8
1900	1800	PSKT 95/18io1	--	PSKT 95/18io8	PSKH 95/18io8

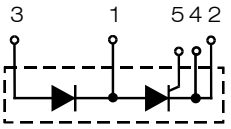
TO-240 AA

Symbol	Test Conditions		Maximum Ratings	
I_{TRMS}, I_{FRMS}	$T_{VJ} = T_{VJM}$		180	A
I_{TAVM}, I_{FAVM}	T_C = 85°C; 180° sine		116	A
I_{TSM}, I_{FSM}	T_{VJ} = 45°C;	t = 10 ms (50 Hz), sine	2250	A
	V_R = 0	t = 8.3 ms (60 Hz), sine	2400	A
	$T_{VJ} = T_{VJM}$	t = 10 ms (50 Hz), sine	2000	A
	V_R = 0	t = 8.3 ms (60 Hz), sine	2150	A
$\int i^2dt$	T_{VJ} = 45°C	t = 10 ms (50 Hz), sine	25 300	A^2s
	V_R = 0	t = 8.3 ms (60 Hz), sine	23 900	A^2s
	$T_{VJ} = T_{VJM}$	t = 10 ms (50 Hz), sine	20 000	A^2s
	V_R = 0	t = 8.3 ms (60 Hz), sine	19 100	A^2s
$(di/dt)_{cr}$	$T_{VJ} = T_{VJM}$ f =50 Hz, t_P =200 µs V_D = 2/3 V_{DRM}	repetitive, I_T = 250 A	150	A/µs
	I_G = 0.45 A di_G/dt = 0.45 A/µs	non repetitive, $I_T = I_{TAVM}$	500	A/µs
$(dv/dt)_{cr}$	$T_{VJ} = T_{VJM}$; R_{GK} = ∞; method 1 (linear voltage rise)	V_{DR} = 2/3 V_{DRM}	1000	V/µs
P_{GM}	$T_{VJ} = T_{VJM}$	t_P = 30 µs	10	W
	$I_T = I_{TAVM}$	t_P = 300 µs	5	W
P_{GAV}			0.5	W
V_{RGM}			10	V
T_{VJ}			-40...+125	°C
T_{VJM}			125	°C
T_{stg}			-40...+125	°C
V_{ISOL}	50/60 Hz, RMS	t = 1 min	3000	V~
	$I_{ISOL} \leq$ 1 mA	t = 1 s	3600	V~
M_d	Mounting torque (M5)		2.5-4.0/22-35	Nm/lb.in.
	Terminal connection torque (M5)		2.5-4.0/22-35	Nm/lb.in.
Weight	Typical including screws		90	g

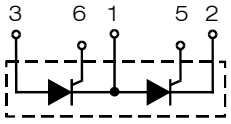
PSKT Version 1



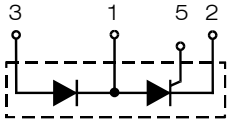
PSKH Version 1



PSKT Version 8



PSKH Version 8



Features

- International standard package, JEDEC TO-240 AA
- Direct copper bonded Al_2O_3 -ceramic base plate
- Planar passivated chips
- Isolation voltage 3600 V~
- UL registered, E 148688
- Gate-cathode twin pins for version 1

Applications

- DC motor control
- Softstart AC motor controller
- Light, heat and temperature control

Advantages

- Space and weight savings
- Simple mounting with two screws
- Improved temperature and power cycling capability
- Reduced protection circuits

Data according to IEC 60747 and refer to a single thyristor/diode unless otherwise stated.

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