

Thyristor module PSKT 42M

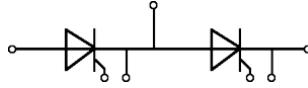
$$I_{T(RMS)} = 2 \times 63 \text{ A}$$

$$I_{T(AV)} = 2 \times 40 \text{ A}$$

$$V_{RRM} = 800-1800 \text{ V}$$

Preliminary Data Sheet

V_{RSM} V	V_{RRM} V	Type
900	800	PSKT 42M/08
1100	1000	PSKT 42M/10
1300	1200	PSKT 42M/12
1500	1400	PSKT 42M/14
1700	1600	PSKT 42M/16
1900	1800	PSKT 42M/18



Symbol	Test Conditions	Maximum Ratings
$I_{T(RMS)}$	$T_{VJ} = T_{VJM}$	63 A
$I_{T(AV)}$	$T_C = 85^\circ\text{C}$	40 A
I_{TSM}	$T_{VJ} = 125^\circ\text{C}$ $t = 10 \text{ ms}$ half sine	900 A
$\int i^2 dt$	$T_{VJ} = 125^\circ\text{C}$ $t = 10 \text{ ms}$ half sine	4,05 A ² s*10 ³
$(di/dt)_{cr}$	$T_{VJ} = T_{VJM}$ $t_r \leq 0,5\mu\text{s}$ gate source 1,5A	200 A/ μs
$(dv/dt)_{cr}$	$T_{VJ} = T_{VJM}$ $V_{DM}=2/3V_{DRM}$	1000 V/ μs
T_{VJ}		-40 ... + 125 °C
T_{VJM}		125 °C
T_{stg}		-40 ... + 125 °C
V_{ISOL}	50 HZ, RMS $t = 1 \text{ min}$	min. 3000 V ~
	$I_{ISOL} \leq 1 \text{ mA}$	
M_d	Terminal connection torque (M5)	4,0 Nm
	Mounting torque (M6)	6,0 Nm
Weight	typ.	160 g

Features

- Isolated mounting base 3000V~
- Pressure contact technology with increased power cycling capability

Applications

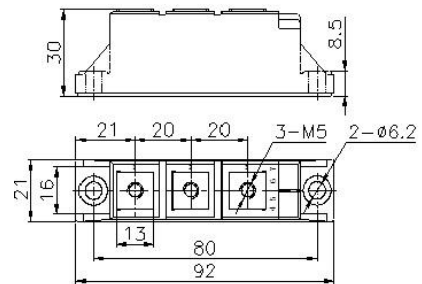
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

Advantages

- Easy to mount with two screws
- Space and weight savings
- Improved temperature and power cycling capability

Package, style and outline

Dimensions in mm (1mm = 0.0394")



Symbol	Test Conditions	Characteristic Value
$I_{RRM}; I_{DRM}$	$V_R = V_{RRM}$ $T_{VJ} = 125^\circ\text{C}$ $V_D = V_{DRM}$	$\leq 8 \text{ mA}$
V_{TM}	$I_T = 120 \text{ A}$ $T_{VJ} = 25^\circ\text{C}$	$\leq 1,6 \text{ V}$
V_{TO}	For power-loss calculations only	0,85 V
r_T	$T_{VJ} = T_{VJM}$	5,57 m Ω
I_{GT}		30-100 mA
V_{GT}	$V_A = 12 \text{ V}$ $T_{VJ} = 25^\circ\text{C}$ $I_A = 1 \text{ A}$	0,8-2,5 V
I_H		20-120 mA
V_{GD}	$V_{DM}=2/3V_{DRM}$ $T_{VJ} = 125^\circ\text{C}$	0,2 V
$R_{th(j-c)}$	Per chip; Single side cooled	0,65 °C/W