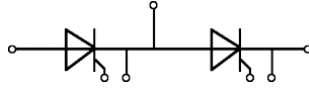


Thyristor module PSKT 502M

$I_{T(RMS)} = 2 \times 785 \text{ A}$
 $I_{T(AV)} = 2 \times 500 \text{ A}$
 $V_{RRM} = 800-1800 \text{ V}$

Preliminary Data Sheet

V_{RSM} V	V_{RRM} V	Type
900	800	PSKT 502M/08
1100	1000	PSKT 502M/10
1300	1200	PSKT 502M/12
1500	1400	PSKT 502M/14
1700	1600	PSKT 502M/16
1900	1800	PSKT 502M/18



Symbol	Test Conditions	Maximum Ratings
$I_{T(RMS)}$	$T_{VJ} = 125^\circ\text{C}$	half sine 785 A
$I_{T(AV)}$	$T_C = 85^\circ\text{C}$	500 A
I_{TSM}	$T_{VJ} = 125^\circ\text{C}$ t = 10 ms	half sine 14500 A
$\int i^2 dt$	$T_{VJ} = 125^\circ\text{C}$ t = 10 ms	half sine 1051 A ² s*10 ³
$(di/dt)_{cr}$	$T_{VJ} = 125^\circ\text{C}$ t _r ≤ 0,5μs	gate source 1,5A 200 A/μs
$(dv/dt)_{cr}$	$T_{VJ} = 125^\circ\text{C}$ 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 min I _{ISOL} ≤ 1 mA	min. 3000 V ~
M_d	Terminal connection torque (M10)	12,0 Nm
	Mounting torque (M6)	6,0 Nm
Weight	typ.	1430 g

Features

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

Applications

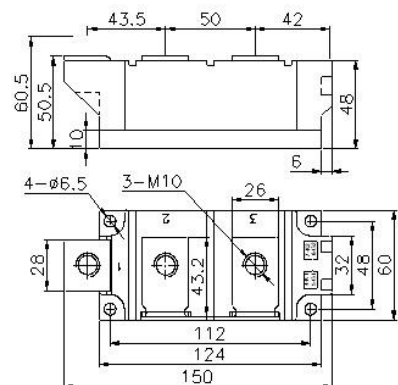
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

Advantages

- Easy to mount
- 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
$I_{RRM}; I_{DRM}$	$V_R = V_{RRM}$ $T_{VJ} = 125^\circ\text{C}$ $V_D = V_{DRM}$	≤ 35 mA
V_{TM}	$I_{TM} = 1500 \text{ A}$ $T_{VJ} = 25^\circ\text{C}$	≤ 1,44 V
V_{TO}	For power-loss calculations only	0,8 V
r_T	$T_{VJ} = 125^\circ\text{C}$	0,34 mΩ
I_{GT}		30-200 mA
V_{GT}	$V_A = 12 \text{ V}$ $T_{VJ} = 25^\circ\text{C}$ $I_A = 1 \text{ A}$	1,0-3,0 V
I_H		20-200 mA
V_{GD}	$V_{DM} = 2/3 V_{DRM}$ $T_{VJ} = 125^\circ\text{C}$	0,2 V
$R_{th(j-c)}$	Per chip; Single side cooled	0,065 °C/W