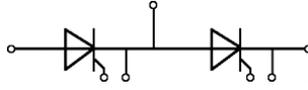


## Thyristor module PSKT 602M

$I_{T(RMS)} = 2 \times 942 \text{ A}$   
 $I_{T(AV)} = 2 \times 600 \text{ A}$   
 $V_{RRM} = 800-1800 \text{ V}$

### Preliminary Data Sheet

$V_{RSM}$ V	$V_{RRM}$ V	Type
900	800	PSKT 602M/08
1100	1000	PSKT 602M/10
1300	1200	PSKT 602M/12
1500	1400	PSKT 602M/14
1700	1600	PSKT 602M/16
1900	1800	PSKT 602M/18



Symbol	Test Conditions	Maximum Ratings
$I_{T(RMS)}$	$T_{VJ} = 125^\circ\text{C}$	half sine 942 A
$I_{T(AV)}$	$T_C = 85^\circ\text{C}$	600 A
$I_{TSM}$	$T_{VJ} = 125^\circ\text{C}$ t = 10 ms	half sine 16000 A
$\int i^2 dt$	$T_{VJ} = 125^\circ\text{C}$ t = 10 ms	half sine 1280 A <sup>2</sup> s*10 <sup>3</sup>
$(di/dt)_{cr}$	$T_{VJ} = 125^\circ\text{C}$ t <sub>r</sub> ≤ 0,5μs	gate source 1,5A 200 A/μs
$(dv/dt)_{cr}$	$T_{VJ} = 125^\circ\text{C}$ V <sub>DM</sub> =2/3V <sub>DRM</sub>	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 <sub>ISOL</sub> ≤ 1 mA	min. 3000 V ~
$M_d$	Terminal connection torque (M12)	14,0 Nm
	Mounting torque (M8)	12,0 Nm
<b>Weight</b>	typ.	3360 g

### Features

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

### Applications

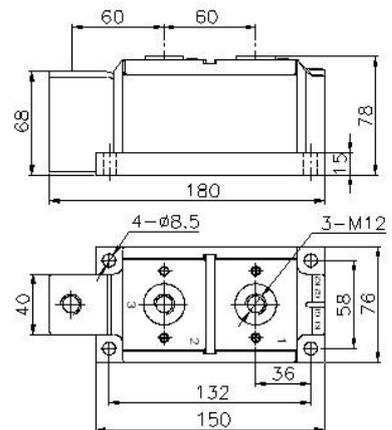
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

### 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
$I_{RRM}; I_{DRM}$	$V_R = V_{RRM}$ $T_{VJ} = 125^\circ\text{C}$ $V_D = V_{DRM}$	≤ 45 mA
$V_{TM}$	$I_{TM} = 1800 \text{ A}$ $T_{VJ} = 25^\circ\text{C}$	≤ 1,45 V
$V_{TO}$	For power-loss calculations only	0,8 V
$r_T$	$T_{VJ} = 125^\circ\text{C}$	0,28 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
$R_{th(j-o)}$	Per chip; Single side cooled	0,054 °C/W