

## Thyristor/Diode module

## PSKH 802M

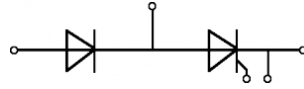
$$I_{T(RMS)} = 2x 1256 A$$

$$I_{T(AV)} = 2x 800 A$$

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

### Preliminary Data Sheet

$V_{RSM}$ V	$V_{RRM}$ V	Type
900	800	PSKH 802M/08
1100	1000	PSKH 802M/10
1300	1200	PSKH 802M/12
1500	1400	PSKH 802M/14
1700	1600	PSKH 802M/16
1900	1800	PSKH 802M/18



Symbol	Test Conditions	Maximum Ratings
$I_{T(RMS)}$	$T_{VJ} = 125^{\circ}C$	half sine 1256 A
$I_{T(AV)}$	$T_C = 85^{\circ}C$	800 A
$I_{TSM}$	$T_{VJ} = 125^{\circ}C$ t = 10 ms	half sine 22000 A
$\int i^2 dt$	$T_{VJ} = 125^{\circ}C$ t = 10 ms	half sine 2420 A <sup>2</sup> s*10 <sup>3</sup>
$(di/dt)_{cr}$	$T_{VJ} = 125^{\circ}C$ t <sub>r</sub> ≤ 0,5μs	gate source 1,5A 200 A/μs
$(dv/dt)_{cr}$	$T_{VJ} = 125^{\circ}C$ 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

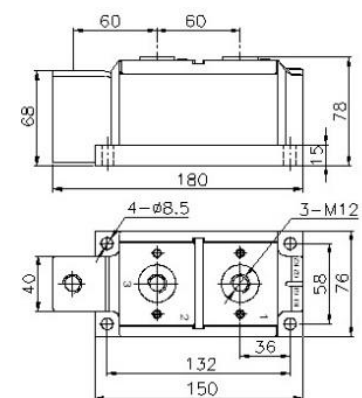
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

### 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 <sub>R</sub> = V <sub>RRM</sub> T <sub>VJ</sub> = 125°C V <sub>D</sub> = V <sub>DRM</sub>	≤ 45 mA
$I_{RRM} ; I_{DRM}$	V <sub>DRM</sub> &V <sub>RRM</sub> tp=10ms V <sub>DSM</sub> &V <sub>RSM</sub> = V <sub>DRM</sub> &V <sub>RRM</sub> +100V	600-1800 V
$V_{TM}$	I <sub>TM</sub> = 1256 A T <sub>VJ</sub> = 25°C	≤ 1,86 V
$V_{TO}$	For power-loss calculations only	0,8 V
$r_t$	T <sub>VJ</sub> = 125°C	0,20 mΩ
$I_{GT}$		30-200 mA
$V_{GT}$	V <sub>A</sub> = 12 V T <sub>VJ</sub> = 25°C I <sub>A</sub> = 1 A	1,0-3,0 V
$I_H$		20-200 mA
$V_{GD}$	V <sub>DM</sub> =2/3V <sub>DRM</sub> T <sub>VJ</sub> = 125°C	0,2 V
$R_{th(j-c)}$	Per chip; Single side cooled	0,042 °C/W