

## Thyristor/Diode module

## PSKH 1010M

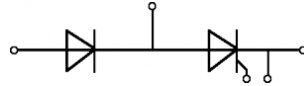
$$I_{T(RMS)} = 2x 1570 A$$

$$I_{T(AV)} = 2x 1000 A$$

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

### Preliminary Data Sheet

$V_{RSM}$ V	$V_{RRM}$ V	Type
900	800	PSKH 1010M/08
1100	1000	PSKH 1010M/10
1300	1200	PSKH 1010M/12
1500	1400	PSKH 1010M/14
1700	1600	PSKH 1010M/16
1900	1800	PSKH 1010M/18



Symbol	Test Conditions	Maximum Ratings
$I_{T(RMS)}$	$T_{VJ} = 125^{\circ}C$	half sine 1570 A
$I_{T(AV)}$	$T_C = 85^{\circ}C$	1000 A
$I_{TSM}$	$T_{VJ} = 125^{\circ}C$ $t = 10 ms$	half sine 28000 A
$\int i^2 dt$	$T_{VJ} = 125^{\circ}C$ $t = 10 ms$	half sine 3920 A <sup>2</sup> s*10 <sup>3</sup>
$(di/dt)_{cr}$	$T_{VJ} = 125^{\circ}C$ $t_r \leq 0,5\mu s$	gate source 1,5A 200 A/ $\mu s$
$(dv/dt)_{cr}$	$T_{VJ} = 125^{\circ}C$ $V_{DM} = 2/3V_{DRM}$	1000 V/ $\mu s$
$T_{VJ}$		-40 ... + 125 °C
$T_{VJM}$		125 °C
$T_{stg}$		-40 ... + 125 °C
$V_{ISOL}$	50 HZ, RMS $t = 1 min$ $I_{ISOL} \leq 1 mA$	min. 3000 V ~
$M_d$	Terminal connection torque (M12)	14,0 Nm
	Mounting torque (M8)	12,0 Nm
Weight	typ.	3660 g

### Features

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

### Applications

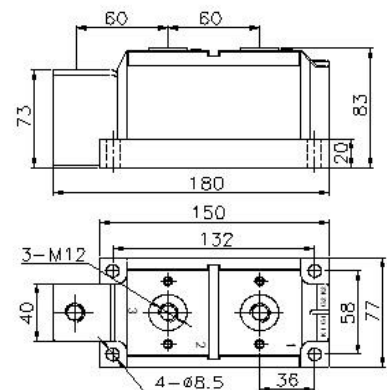
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

### 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
$I_{RRM}; I_{DRM}$	$V_R = V_{RRM}$ $T_{VJ} = 125^{\circ}C$ $V_D = V_{DRM}$	$\leq 55 mA$
$V_{TM}$	$I_{TM} = 1570 A$ $T_{VJ} = 25^{\circ}C$	$\leq 1,96 V$
$V_{TO}$	For power-loss calculations only	0,8 V
$r_t$	$T_{VJ} = 125^{\circ}C$	0,15 m $\Omega$
$I_{GT}$		30-200 mA
$V_{GT}$	$V_A = 12 V$ $T_{VJ} = 25^{\circ}C$ $I_A = 1 A$	1,0-3,0 V
$I_H$		20-200 mA
$V_{GD}$	$V_{DM} = 2/3V_{DRM}$ $T_{VJ} = 125^{\circ}C$	0,2 V
$R_{th(j-c)}$	Per chip; Single side cooled	0,034 °C/W