

## Thyristor/Diode module

## PSKH 402M

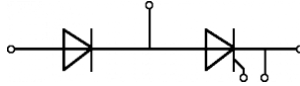
$$I_{T(RMS)} = 2 \times 628 \text{ A}$$

$$I_{T(AV)} = 2 \times 400 \text{ A}$$

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

### Preliminary Data Sheet

$V_{RSM}$ V	$V_{RRM}$ V	Type
900	800	PSKH 402M/08
1100	1000	PSKH 402M/10
1300	1200	PSKH 402M/12
1500	1400	PSKH 402M/14
1700	1600	PSKH 402M/16
1900	1800	PSKH 402M/18



### Symbol Test Conditions Maximum Ratings

$I_{T(RMS)}$	$T_{VJ} = 125^\circ\text{C}$	half sine	628	A
$I_{T(AV)}$	$T_C = 85^\circ\text{C}$		400	A
$I_{TSM}$	$T_{VJ} = 125^\circ\text{C}$	$t = 10 \text{ ms}$	half sine	12500 A
$\int i^2 dt$	$T_{VJ} = 125^\circ\text{C}$	$t = 10 \text{ ms}$	half sine	781 $\text{A}^2 \text{ s} \cdot 10^3$
$(di/dt)_{cr}$	$T_{VJ} = 125^\circ\text{C}$	$t_r \leq 0,5 \mu\text{s}$	gate source 1,5A	200 $\text{A}/\mu\text{s}$
$(dv/dt)_{cr}$	$T_{VJ} = 125^\circ\text{C}$	$V_{DM} = 2/3 V_{DRM}$		1000 $\text{V}/\mu\text{s}$
$T_{VJ}$			-40 ... + 125	$^\circ\text{C}$
$T_{VJM}$			125	$^\circ\text{C}$
$T_{stg}$			-40 ... + 125	$^\circ\text{C}$
$V_{ISOL}$	50 HZ, RMS	$t = 1 \text{ min}$	min. 3000	$\text{V} \sim$
	$I_{ISOL} \leq 1 \text{ mA}$			
$M_d$	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

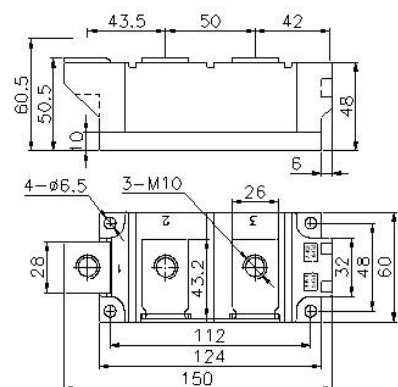
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

### 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

$I_{RRM}; I_{DRM}$	$V_R = V_{RRM}$ $V_D = V_{DRM}$	$T_{VJ} = 125^\circ\text{C}$	$\leq$	35	mA
$V_{TM}$	$I_{TM} = 628 \text{ A}$	$T_{VJ} = 25^\circ\text{C}$	$\leq$	1,52	V
$V_{TO}$	For power-loss calculations only			0,80	V
$r_t$	$T_{VJ} = 125^\circ\text{C}$			0,49	$\text{m}\Omega$
$I_{GT}$				30-200	mA
$V_{GT}$	$V_A = 12 \text{ V}$ $I_A = 1 \text{ A}$	$T_{VJ} = 25^\circ\text{C}$		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			0,08	$^\circ\text{C}/\text{W}$