

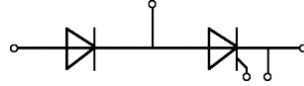
Thyristor/Diode module

PSKH 1210M

$I_{T(RMS)} = 2 \times 1884 \text{ A}$
 $I_{T(AV)} = 2 \times 1200 \text{ A}$
 $V_{RRM} = 800-1800 \text{ V}$

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
$I_{T(RMS)}$	$T_{VJ} = 125^\circ\text{C}$	half sine 1884 A
$I_{T(AV)}$	$T_C = 85^\circ\text{C}$	1200 A
I_{TSM}	$T_{VJ} = 125^\circ\text{C}$ $t = 10 \text{ ms}$	half sine 34000 A
$\int i^2 dt$	$T_{VJ} = 125^\circ\text{C}$ $t = 10 \text{ ms}$	half sine 5480 $\text{A}^2 \text{s} \cdot 10^3$
$(di/dt)_{cr}$	$T_{VJ} = 125^\circ\text{C}$ $t_r \leq 0,5 \mu\text{s}$	gate source 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 $t = 1 \text{ min}$ $I_{ISOL} \leq 1 \text{ mA}$	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

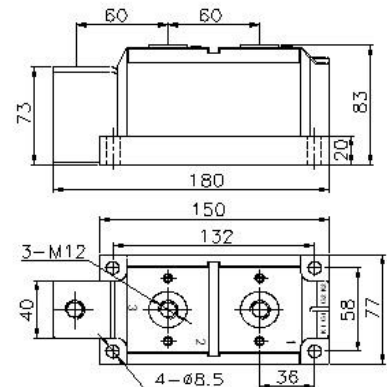
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

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
$I_{RRM}; I_{DRM}$	$V_R = V_{RRM}$ $T_{VJ} = 125^\circ\text{C}$ $V_D = V_{DRM}$	$\leq 55 \text{ mA}$
V_{TM}	$I_{TM} = 1884 \text{ A}$ $T_{VJ} = 25^\circ\text{C}$	$\leq 1,76 \text{ V}$
V_{TO}	For power-loss calculations only	0,8 V
r_t	$T_{VJ} = 125^\circ\text{C}$	0,09 $\text{m}\Omega$
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	0,031 $^\circ\text{C}/\text{W}$