POWERSEM

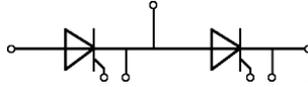## Thyristor module   PSKT 1210M

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

Preliminary Data Sheet

V_{RSM} V	V_{RRM} V	Type
900	800	PSKT 1210M/08
1100	1000	PSKT 1210M/10
1300	1200	PSKT 1210M/12
1500	1400	PSKT 1210M/14
1700	1600	PSKT 1210M/16
1900	1800	PSKT 1210M/18

Symbol	Test Conditions			Maximum Ratings	
$I_{T(RMS)}$	$T_{VJ} = 125°C$		half sine	1884	A
$I_{T(AV)}$	$T_C = 85°C$			1200	A
I_{TSM}	$T_{VJ} = 125°C$	t = 10 ms	half sine	34000	A
$\int i^2 dt$	$T_{VJ} = 125°C$	t = 10 ms	half sine	5480	$A^2 s*10^3$
$(di/dt)_{cr}$	$T_{VJ} = 125°C$	$t_r \leq 0,5\mu s$	gate source 1,5A	200	A/µs
$(dv/dt)_{cr}$	$T_{VJ} = 125°C$	$V_{DM}=2/3V_{DRM}$		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		min. 3000	V ~
	$I_{ISOL} \leq 1$ mA				
M_d	Terminal connection torque	(M12)		14,0	Nm
	Mounting torque	(M8)		12,0	Nm
Weight	typ.			3660	g

Symbol	Test Conditions			Characteristic Value	
I_{RRM} ; I_{DRM}	$V_R = V_{RRM}$ $V_D = V_{DRM}$	$T_{VJ} = 125°C$	$\leq$	55	mA
V_{TM}	$I_{TM} = 3000$ A	$T_{VJ} = 25°C$	$\leq$	1,76	V
V_{TO}	For power-loss calculations only			0,8	V
r_t	$T_{VJ} = 125°C$			0,09	mΩ
I_{GT}				30-200	mA
V_{GT}	$V_A = 12$ V $I_A = 1$ A	$T_{VJ} = 25°C$		1,0-3,0	V
I_H				20-200	mA
V_{GD}	$V_{DM}=2/3V_{DRM}$	$T_{VJ} = 125°C$		0,2	V
$R_{th(j-c)}$	Per chip; Single side cooled			0,031	°C /W

Features
- Isolated mounting base 3000V~
- Pressure contact technology with increased power cycling capability
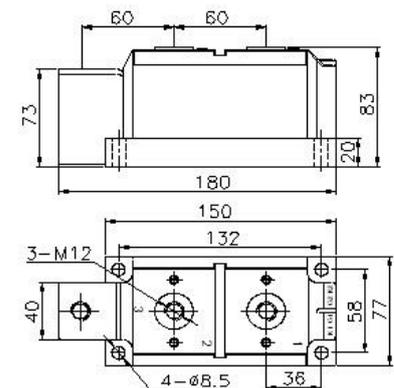
Applications
- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter

Advantages
- Easy to mount
- Space and weight savings
- Improved temperature and power cycling capability

Package, style and outline
Dimensions in mm (1mm = 0.0394")