

Thyristor Modules

Thyristor/Diode Modules

$$I_{TRMS} = 2 \times 50 \text{ A}$$

$$I_{TAVM} = 2 \times 32 \text{ A}$$

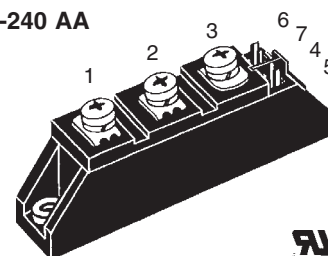
$$V_{RRM} = 800-1600 \text{ V}$$

V_{RSM} V_{DSM} V	V_{RRM} V_{DRM} V	Type						
		Version	1 B	8 B	Version	1 B	8 B	
900	800	MCC 26-08	io1 B / io8 B		MCD 26-08	io1 B / io8 B		
1300	1200	MCC 26-12	io1 B / io8 B		MCD 26-12	io1 B / io8 B		
1500	1400	MCC 26-14	io1 B / io8 B		MCD 26-14	io1 B / io8 B		
1700	1600	MCC 26-16	io1 B / io8 B		MCD 26-16	io1 B / io8 B		

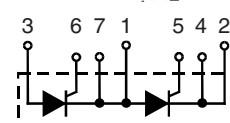
Symbol	Conditions	Maximum Ratings	
I_{TRMS}, I_{FRMS}	$T_{VJ} = T_{VJM}$	50	A
I_{TAVM}, I_{FAVM}	$T_C = 75^\circ\text{C}; 180^\circ \text{ sine}$	32	A
	$T_C = 85^\circ\text{C}; 180^\circ \text{ sine}$	27	A
I_{TSM}, I_{FSM}	$T_{VJ} = 45^\circ\text{C};$ $V_R = 0$	$t = 10 \text{ ms (50 Hz), sine}$	520 A
		$t = 8.3 \text{ ms (60 Hz), sine}$	560 A
	$T_{VJ} = T_{VJM}$ $V_R = 0$	$t = 10 \text{ ms (50 Hz), sine}$	460 A
		$t = 8.3 \text{ ms (60 Hz), sine}$	500 A
$\int i^2 dt$	$T_{VJ} = 45^\circ\text{C}$ $V_R = 0$	$t = 10 \text{ ms (50 Hz), sine}$	1350 A ² s
		$t = 8.3 \text{ ms (60 Hz), sine}$	1300 A ² s
	$T_{VJ} = T_{VJM}$ $V_R = 0$	$t = 10 \text{ ms (50 Hz), sine}$	1050 A ² s
		$t = 8.3 \text{ ms (60 Hz), sine}$	1030 A ² s
$(di/dt)_{cr}$	$T_{VJ} = T_{VJM}$ $f = 50 \text{ Hz}, t_p = 200 \mu\text{s}$ $V_D = \frac{2}{3} V_{DRM}$ $I_G = 0.45 \text{ A}$ $di_G/dt = 0.45 \text{ A}/\mu\text{s}$	repetitive, $I_T = 45 \text{ A}$	150 A/ μs
		non repetitive, $I_T = I_{TAVM}$	500 A/ μs
$(dv/dt)_{cr}$	$T_{VJ} = T_{VJM};$ $R_{GK} = \infty; \text{method 1 (linear voltage rise)}$	$V_{DR} = \frac{2}{3} V_{DRM}$	1000 V/ μs
P_{GM}	$T_{VJ} = T_{VJM}$ $I_T = I_{TAVM}$	$t_p = 30 \mu\text{s}$	10 W
		$t_p = 300 \mu\text{s}$	5 W
P_{GAV}			0.5 W
V_{RGM}			10 V
T_{VJ}		-40...+125	°C
T_{VJM}		125	°C
T_{stg}		-40...+125	°C
V_{ISOL}	50/60 Hz, RMS	$t = 1 \text{ min}$	3000 V~
	$I_{ISOL} \leq 1 \text{ mA}$	$t = 1 \text{ s}$	3600 V~
M_d	Mounting torque (M5)		2.5-4.0/22-35 Nm/lb.in.
	Terminal connection torque (M5)		2.5-4.0/22-35 Nm/lb.in.
Weight	Typical including screws		90 g

Data according to IEC 60747 and refer to a single thyristor/diode unless otherwise stated.

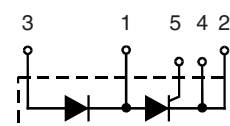
TO-240 AA



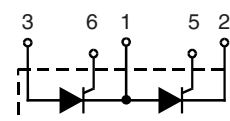
MCC
Version 1 B



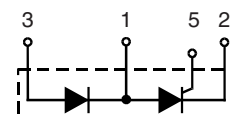
MCD
Version 1 B



MCC
Version 8 B



MCD
Version 8 B



Features

- International standard package, JEDEC TO-240 AA
- Direct copper bonded Al_2O_3 -ceramic base plate
- Planar passivated chips
- Isolation voltage 3600 V~
- UL registered, E 72873
- Gate-cathode twin pins for version 1B

Applications

- DC motor control
- Softstart AC motor controller
- Light, heat and temperature control

Advantages

- Space and weight savings
- Simple mounting with two screws
- Improved temperature and power cycling
- Reduced protection circuits