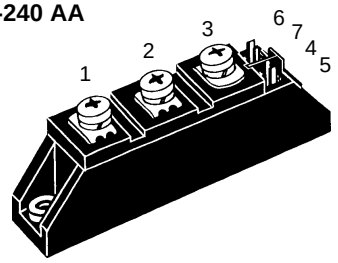
Thyristor Modules
Thyristor/Diode Modules

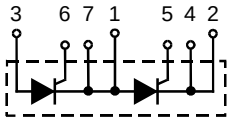
I_{TRMS} = 2x 180 A
I_{TAVM} = 2x 115 A
V_{RRM} = 800-1800 V

V_{RSM} V_{DSM}	V_{RRM} V_{DRM}	Type			
V	V	Version 1 B		Version 8 B	
900	800	MCC 72-08io1 B	--	MCC 72-08io8 B	MCD 72-08io8 B
1300	1200	MCC 72-12io1 B	MCD 72-12io1B	MCC 72-12io8 B	MCD 72-12io8 B
1500	1400	MCC 72-14io1 B	--	MCC 72-14io8 B	MCD 72-14io8 B
1700	1600	MCC 72-16io1 B	MCD 72-16io1B	MCC 72-16io8 B	MCD 72-16io8 B
1900	1800	MCC 72-18io1 B	--	MCC 72-18io8 B	MCD 72-18io8 B

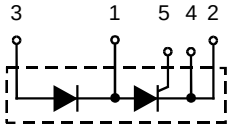
TO-240 AA



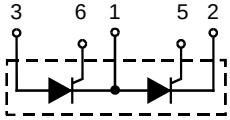
MCC Version 1 B



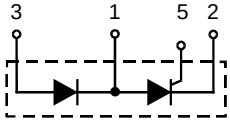
MCD Version 1 B



MCC Version 8 B



MCD Version 8 B



Symbol	Test Conditions		Maximum Ratings	
I_{TRMS}, I_{FRMS}	$T_{VJ} = T_{VJM}$		180	A
I_{TAVM}, I_{FAVM}	T_C = 63°C; 180° sine		115	A
	T_C = 85°C; 180° sine		85	A
I_{TSM}, I_{FSM}	T_{VJ} = 45°C;	t = 10 ms (50 Hz), sine	1700	A
	V_R = 0	t = 8.3 ms (60 Hz), sine	1800	A
	$T_{VJ} = T_{VJM}$	t = 10 ms (50 Hz), sine	1540	A
	V_R = 0	t = 8.3 ms (60 Hz), sine	1640	A
$\int i^2dt$	T_{VJ} = 45°C	t = 10 ms (50 Hz), sine	14 450	A^2s
	V_R = 0	t = 8.3 ms (60 Hz), sine	13 500	A^2s
	$T_{VJ} = T_{VJM}$	t = 10 ms (50 Hz), sine	11 850	A^2s
	V_R = 0	t = 8.3 ms (60 Hz), sine	11 300	A^2s
$(di/dt)_{cr}$	$T_{VJ} = T_{VJM}$	repetitive, I_T = 250 A	150	A/µs
	f =50 Hz, t_P =200 µs			
	V_D = 2/3 V_{DRM}			
	I_G = 0.45 A	non repetitive, $I_T = I_{TAVM}$	500	A/µs
	di_G/dt = 0.45 A/µs			
$(dv/dt)_{cr}$	$T_{VJ} = T_{VJM}$;	V_{DR} = 2/3 V_{DRM}	1000	V/µs
	R_{GK} = ∞; method 1 (linear voltage rise)			
P_{GM}	$T_{VJ} = T_{VJM}$	t_P = 30 µs	10	W
	$I_T = I_{TAVM}$	t_P = 300 µs	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 min	3000	V~
	$I_{ISOL} \leq$ 1 mA	t = 1 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.
IXYS reserves the right to change limits, test conditions and dimensions

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

032