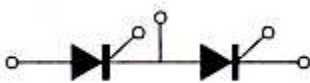


Thyristor Diode Modules (200-300A)

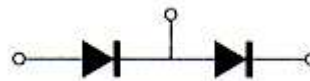
Typical Applications

- Commute power supply
- Switch with no contact
- Temperature control for industrial calefaction
- Electric welding, Transducer
- Battery charge or discharge

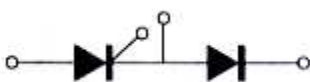
Dual Thyristor Module

Circuit Diagram	$V_{RSM}V_{RRM}$	$I_{DAV}(T_{case}= 100\text{ }^{\circ}C,)$		
		200A	250A	300A
	800V	MTT-200-08	MTT-250-08	MTT-300-08
	1200V	MTT-200-12	MTT-250-12	MTT-300-12
	1400V	MTT-200-14	MTT-250-14	MTT-300-14
	1600V	MTT-200-16	MTT-250-16	MTT-300-16
	1800V	MTT-200-18	MTT-250-18	MTT-300-18

Dual Diode Module

Circuit Diagram	$V_{RSM}V_{RRM}$	$I_{DAV}(T_{case}= 100\text{ }^{\circ}C,)$		
		200A	250A	300A
	800V	MDD-200-08	MDD-250-08	MDD-300-08
	1200V	MDD-200-12	MDD-250-12	MDD-300-12
	1400V	MDD-200-14	MDD-250-14	MDD-300-14
	1600V	MDD-200-16	MDD-250-16	MDD-300-16
	1800V	MDD-200-18	MDD-250-18	MDD-300-18

Thyristor Diode Module

Circuit Diagram	$V_{RSM}V_{RRM}$	$I_{DAV}(T_{case}= 100\text{ }^{\circ}C,)$		
		200A	250A	300A
	800V	MTD-200-08	MTD-250-08	MTD-300-08
	1200V	MTD-200-12	MTD-250-12	MTD-300-12
	1400V	MTD-200-14	MTD-250-14	MTD-300-14
	1600V	MTD-200-16	MTD-250-16	MTD-300-16
	1800V	MTD-200-18	MTD-250-18	MTD-300-18

Electrical Specifications

Symbol	Specifications Names	Specifications Limits			Units	Conditions
I_{TAV}	Average on-state current	200	250	300	A	$T_{VJ}= T_{VJM} 180^{\circ},sin.$
I_{FAV}	Average forward current	200	250	300	A	
I^2t		180	245	304	KA ² s	$t=10\text{ mS } T_J=45^{\circ}C$

		180	245	300	KA ² s	t=8.3 mS T _J =45°C 100 □ V _{RRM}
I _{TSM} I _{FSM}	Surge current	6000 6000	7000 7600	7800 8500	A A	t=10 mS t=8.3 mS
I _{RRM} I _{DRM}	Maximum repetitive peak reverse Leakage current Maximum repetitive peak off-state Leakage current	≤15			mA	T _J =125°C,
V _{RRM}	Maximum repetitive peak reverse voltage	800-1800			V	125°C I _{RRM} , I _{DRM} ≤10mA
V _{DRM}	Maximum repetitive peak off-state voltage					
V _{TM} V _{FM}	Peak value on-state voltage Peak value forward voltage	≤1.9			V	I _{TM} =πI _{TAV} ; I _{FM} =πI _{FAV} T _J =25°C
di/dt	Critical rate of rise of on-state current	150			A/μs	T _J =25°C, 0.67V _{DRM} , I _g =500mA tr<0.5μs, tp>6μs
dv/dt	Critical rate of rise of on-state voltage	500			V/μs	T _J =125°C, 0.67 V _{DRM}
I _H	Holding current	200			mA	T _J =25°C Anode voltage=6v
I _L	Latching current	400			mA	T _J =25°C Anode voltage=6v
P _{GM}	Peak gate power dissipation	10	10	12	W	
I _{GM}	Peak gate power current	2.5	2.5	3	A	
V _{GT}	Gate trigger voltage	≤2			V	T _J =25°C Anode voltage=6v
I _{GT}	Gate trigger current	≤100			mA	
V _{ISO}	Insulation test voltage	2500			V	50Hz, t=1min
T _J	Junction temperature	-40 to 125			°C	
T _{stg}	Storage temperature				°C	
R _{thJC}	Thermal resistance junction to case	0.10	0.09	0.08	K/W	Per module, DC
R _{thCS}	Thermal resistance case to heat-sink	0.05			K/W	Per module, DC
Wt	Weight(Typical)	865			g	
	Size	115×53×62			mm	
	Colour	Black				

Dimension

