

Three – Phase Bridge Rectifier

Features

- Easy connections
- Excellent power volume ratio
- Insulated type

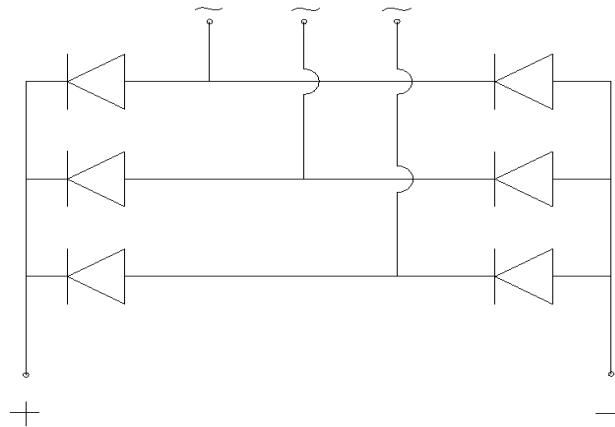
Voltage Ratings ($T_J = 25^{\circ}\text{C}$ unless otherwise noted)				
Type number	Voltage code	VRM, Max. repetitive peak reverse voltage (V)	VRSM, Max. non-repetitive peak reverse voltage (V)	IRRM max @ T_J max (mA)
60 MDS	80	800	900	10
	100	1000	1100	
	120	1200	1300	
	140	1400	1500	
	160	1600	1700	

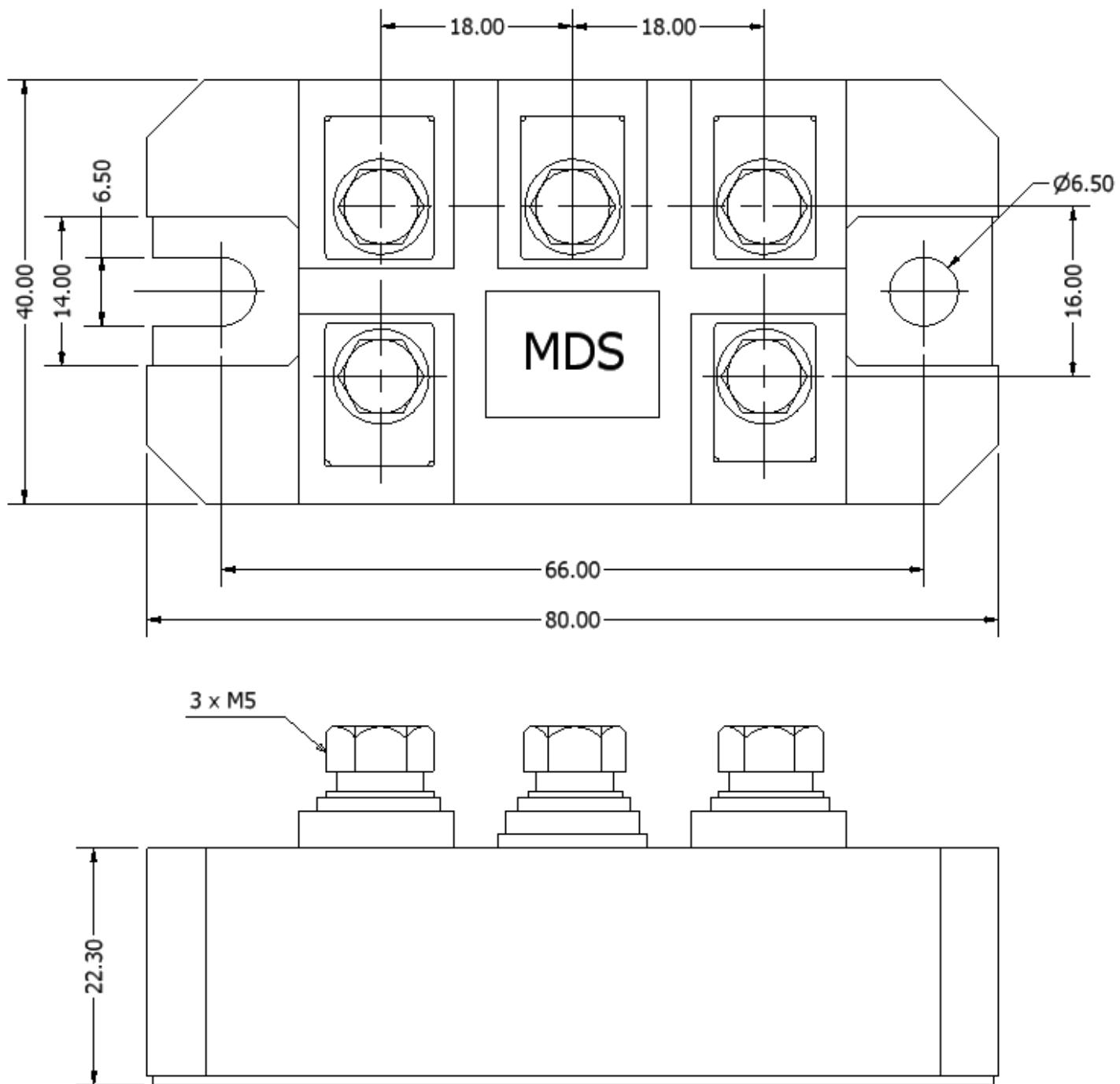


Thermal and Mechanical Specifications (TA = 250C unless otherwise noted)		Symbol	Values	Units
Maximum operating junction temperature range		T_J	- 40 to + 150	$^{\circ}\text{C}$
Maximum storage temperature range		T_{Stg}	- 40 to + 150	$^{\circ}\text{C}$
Maximum thermal resistance, junction to case	DC operation per module	$R_{th(JC)}$	0.37	$^{\circ}\text{C}/\text{W}$
	DC operation per junction		2.22	
	120 Rect conduction angle per module		0.40	
	120 Rect conduction angle per junction		2.42	
Maximum thermal resistance, case to heatsink	Per module, Mounting surface smooth, flat and greased	$R_{th(CS)}$	0.03	$^{\circ}\text{C}/\text{W}$
Mounting torque $\pm 10\%$	to heatsink	T	4 to 6	Nm
	to terminal		3 to 4	
Approximate weight			176	g

Electrical Specifications ($T_J = 25^0\text{C}$ unless otherwise noted)

Parameters	Conditions			Symbol	Values	Units	
Maximum DC output current	120° Rect conduction angle, $T_C = 85^0\text{C}$			I_0	60	A	
Maximum peak one-cycle forward, non-repetitive surge current	t = 10ms	No voltage reapplied	$T_J = T_J \text{ max.}$	I_{FSM}	420	A	
	t = 8.3ms				440		
	t = 8.3ms	100% V_{RRM} reapplied			350		
	t = 10ms				370		
Maximum I^2t for fusing	T = 8.3ms	No voltage reapplied	I^2t		870	A^2s	
	T = 10ms				790		
	T = 8.3ms	100% V_{RRM} reapplied			610		
	T = 10ms				560		
Maximum $J^2\sqrt{t}$ for fusing	T = 0.1 to 10ms, no voltage reapplied			$J^2\sqrt{t}$	8700	$\text{A}^2\sqrt{\text{s}}$	
Low level value of threshold voltage	[$16.7\% * \pi * I_{F(AV)} < I < \pi * I_{F(AV)}$], @ T_J max			$V_{F(TO)1}$	0.85	V	
High level value of threshold voltage	[$I > \pi * I_{F(AV)}$], @ T_J max			$V_{F(TO)2}$	1.07	V	
Low level value of forward slope resistance	[$16.7\% * \pi * I_{F(AV)} < I < \pi * I_{F(AV)}$], @ T_J max			r_1	8.04	$\text{m}\Omega$	
High level value of forward slope resistance	[$I > \pi * I_{F(AV)}$], @ T_J max			r_2	7.08	$\text{m}\Omega$	
Maximum forward voltage drop	$I_{pk} = 100\text{A}$, $t_p = 400 \mu\text{s}$ single junction			V_{FM}	1.75	V	
RMS isolation voltage	$f = 50\text{Hz}$, $t = 1\text{ms}$, all terminals shorted			V_{ISO}	4000	V	

Diode Configuration




ALL DIMENSIONS IN MM