

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	VRRM, 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	



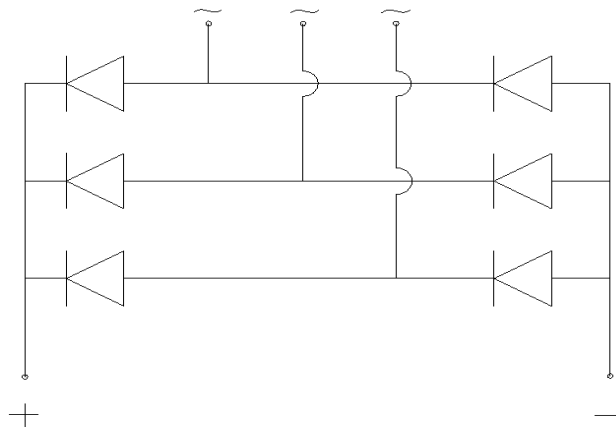
MDS

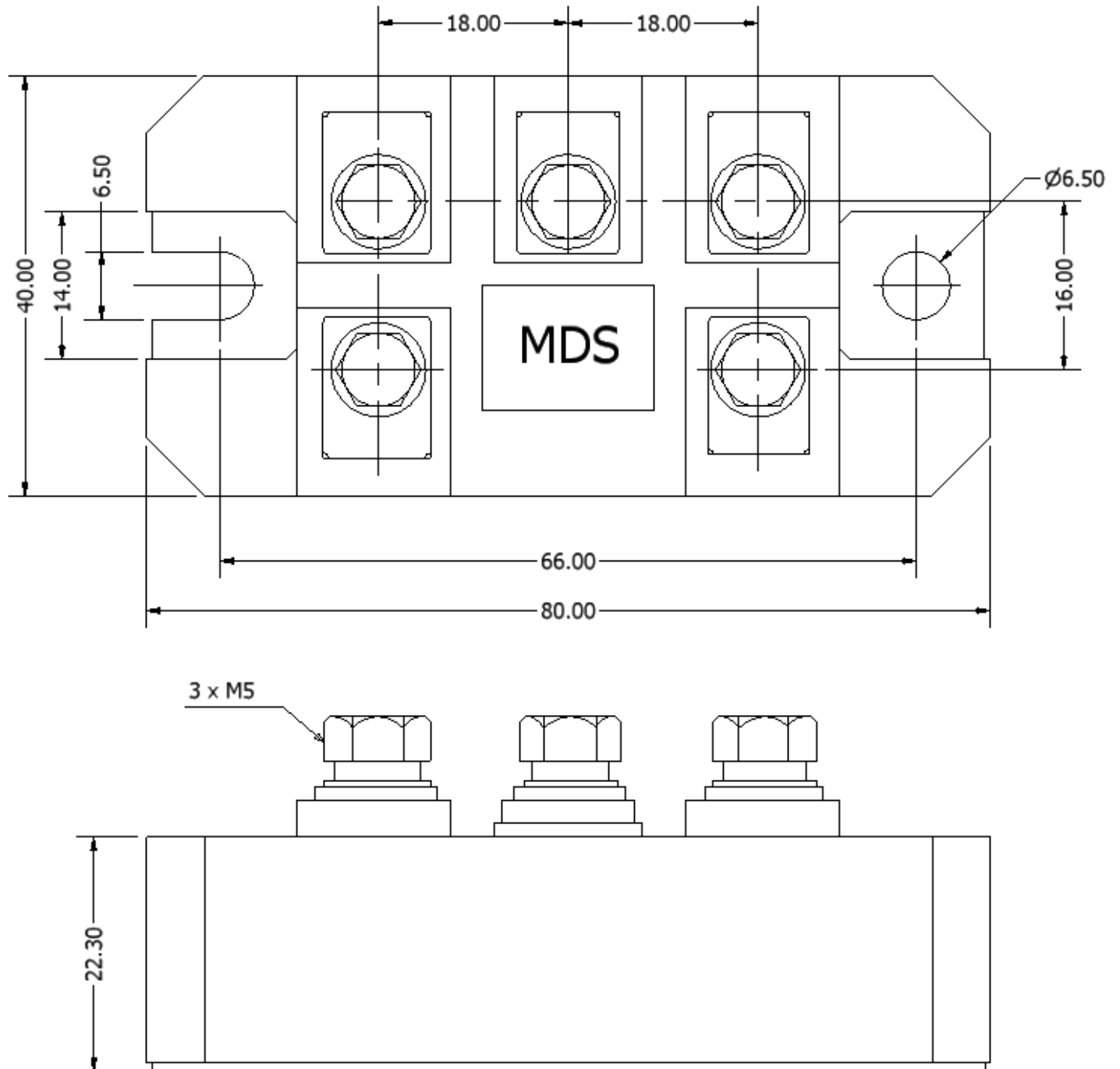
Thermal and Mechanical Specifications ($T_A = 25^{\circ}\text{C}$ unless otherwise noted)

Parameters	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	$R_{\text{th}(JC)}$	DC operation per module	0.37
		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	$R_{\text{th}(CS)}$	Per module, Mounting surface smooth, flat and greased	0.03
Mounting torque $\pm 10\%$	T	to heatsink	4 to 6
		to terminal	3 to 4
Approximate weight		176	g

Electrical Specifications (T _J = 25 ^o C unless otherwise noted)						
Parameters	Conditions			Symbol	Values	Units
Maximum DC output current	120 ^o Rect conduction angle, T _C = 85 ^o C			I ₀	60	A
Maximum peak one-cycle forward, non-repetitive surge current	t = 10ms	No voltage reapplied	T _J = T _J max.	I _{FSM}	420	A
	t = 8.3ms				440	
	t = 8.3ms	100% V _{RRM} reapplied			350	
	t = 10ms				370	
Maximum I ² t for fusing	T = 8.3ms	No voltage reapplied		I ² t	870	A ² s
	T = 10ms				790	
	T = 8.3ms	100% V _{RRM} reapplied			610	
	T = 10ms				560	
Maximum J ² vt for fusing	T = 0.1 to 10ms, no voltage reapplied			J ² vt	8700	A ² vs
Low level value of threshold voltage	[16.7% * π * I _{F(AV)} < I < π * I _{F(AV)}], @ T _J max			V _{F(TO)1}	0.85	V
High level value of threshold voltage	[I > π * I _{F(AV)}], @ T _J max			V _{F(TO)2}	1.07	V
Low level value of forward slope resistance	[16.7% * π * I _{F(AV)} < I < π * I _{F(AV)}], @ T _J max			r ₁	8.04	mΩ
High level value of forward slope resistance	[I > π * I _{F(AV)}], @ T _J max			r ₂	7.08	mΩ
Maximum forward voltage drop	I _{pk} = 100A, t _p = 400 μs single junction			V _{FM}	1.75	V
RMS isolation voltage	f = 50Hz, t = 1ms, all terminals shorted			V _{ISO}	4000	V

Diode Configuration





ALL DIMENSIONS IN MM