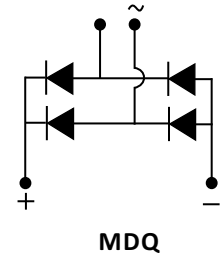


Single Phase Bridge Rectifier, 100 Amps

Features

- Easy connections
- Excellent power volume ratio
- Insulated type



Voltage Ratings ($T_J = 25^\circ\text{C}$ unless otherwise noted)				
Type number	Voltage code	V_{RRM} , Max. repetitive peak reverse voltage (V)	V_{RSM} , Max. non-repetitive peak reverse voltage (V)	I_{RRM} max @ T_J max (mA)
MDQ100	80	800	900	2
	100	1000	1100	
	120	1200	1300	
	140	1400	1500	
	160	1600	1700	

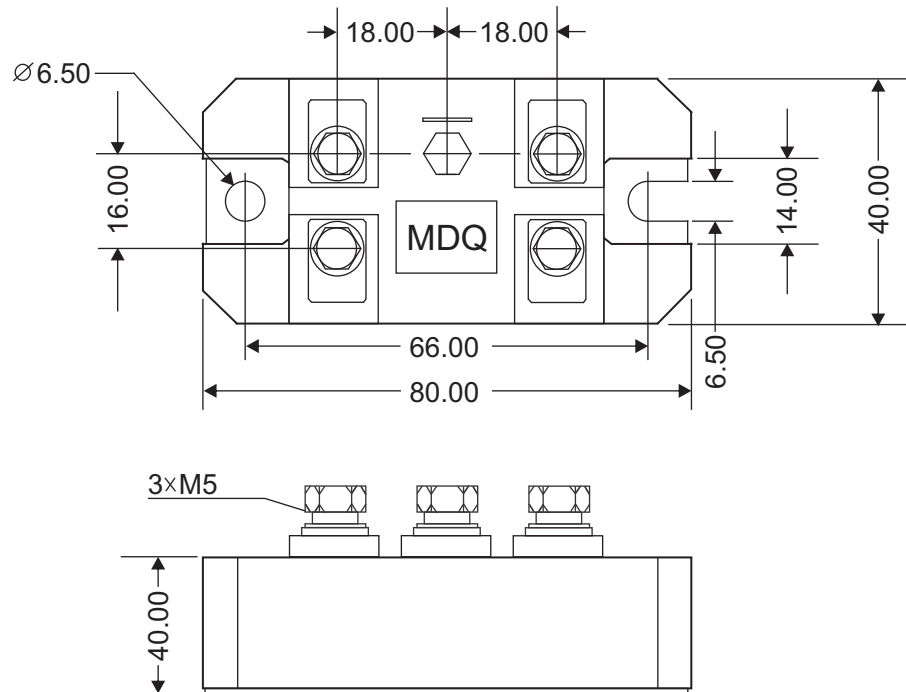


Electrical Specifications ($T_J = 25^\circ\text{C}$ unless otherwise noted)				
Parameters	Conditions	Symbol	Values	Units
Maximum DC output current	$T_C = 100^\circ\text{C}$, $T_J = 150^\circ\text{C}$	I_{DC}	100	A
Forward surge current (non-repetitive), one cycle	$f = 50\text{ Hz}$	I_{FSM}	1500	A
Fusing current	$t = 10\text{ ms}$	I^2t	11300	A^2s
Maximum forward voltage drop	$I_{FM} = 80\text{ A}$, $T_J = 25^\circ\text{C}$	V_{FM}	1.24	V
RMS isolation voltage	1 min.	V_{ISO}	3000	V

Thermal and Mechanical Specifications ($T_J = 25^\circ\text{C}$ 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 + 125	$^\circ\text{C}$
Threshold Voltage	V_{TO}	max. 0.78	V
Slope Resistance	r_T	max. 4.8	$\text{m}\Omega$
Maximum thermal resistance, junction to case	$R_{th(J-C)}$	0.8	$^\circ\text{C}/\text{W}$
Mounting torque	to heatsink	$4 \pm 15\%$	Nm
	to terminal	$4 \pm 15\%$	
Approximate weight	W	180	g

Package Outline

(All dimensions in mm)



Ordering Table

MDQ	100	/	160
1	2		3

1 – Single-Phase Bridge

2 – Current = I_D

3 – Voltage Code x 10 = V_{RRM} (See Voltage Ratings Table)