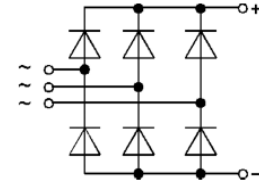


## Three Phase Bridge Rectifier, 160 Amps

### Features

- Easy connections
- Excellent power volume ratio
- Insulated type



MDS

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)
MDS160	80	800	900	15
	100	1000	1100	
	120	1200	1300	
	140	1400	1500	
	160	1600	1700	

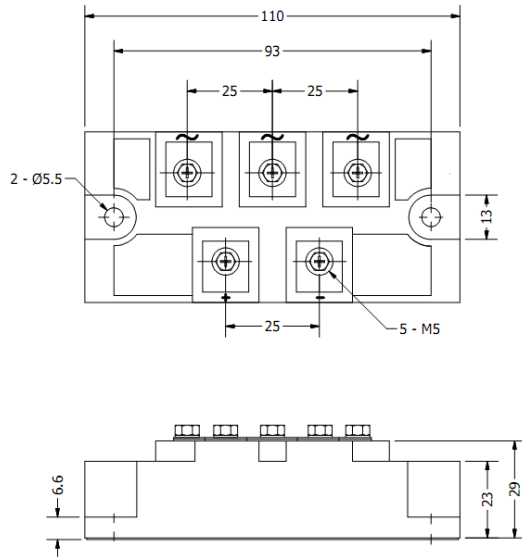


Electrical Specifications ( $T_J = 25^\circ\text{C}$ unless otherwise noted)				
Parameters	Conditions	Symbol	Values	Units
Maximum DC output current	$T_C = 85^\circ\text{C}$	$I_{DC}$	160	A
Forward surge current (non-repetitive), one cycle	$f = 50$ Hz	$I_{FSM}$	1500	A
Fusing current		$I^2t$	11250	$\text{A}^2\text{s}$
Maximum forward voltage drop	$I_{FM} = 150\text{A}, T_J = 25^\circ\text{C}$	$V_{FM}$	1.35	V
RMS isolation voltage		$V_{ISO}$	3000	V

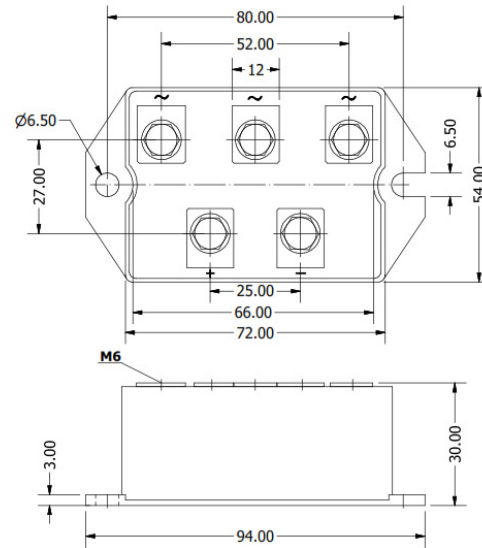
Thermal and Mechanical Specifications ( $T_J = 25^\circ\text{C}$ unless otherwise noted)				
Parameters		Symbol	Values	Units
Maximum operating junction temperature range		$T_J$	- 40 to + 125	$^\circ\text{C}$
Maximum storage temperature range		$T_{STG}$	- 40 to + 125	$^\circ\text{C}$
Maximum thermal resistance, junction to case		$R_{th(J-C)}$	0.12	$^\circ\text{C}/\text{W}$
Mounting torque	to heatsink	F	$4 \pm 15\%$	Nm
	to terminal		$4 \pm 15\%$	
Approximate weight	Package – E	W	340	g
	Package – F		460	
	Package – S		295	

## Package Outline

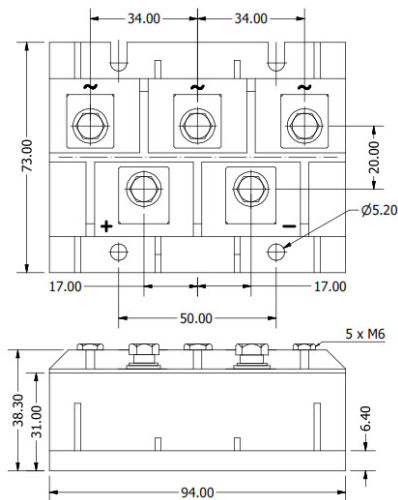
(All dimensions in mm)



**Package Type E**



**Package Type S**



**Package Type F**

## Ordering Table

MDS	160	-	120
1	2	3	4

- 1 – Three-Phase Bridge
- 2 – Current =  $I_D$
- 3 – Package Type
- 4 – Voltage Code x 10 =  $V_{RRM}$  (See Voltage Ratings Table)