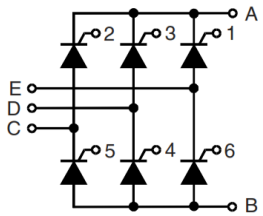
Three Phase Full Controlled Bridge Rectifier, 100 Amps

Features

- Easy connections, screw type terminals
- Good surge current capability
- Low forward voltage drop
- Improved temperature & power dissipation
- Easy mounting



Voltage Ratings (T_J = 25°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)**
NFS100	80	800	900	10
	100	1000	1100	
	120	1200	1300	
	140	1400	1500	
	160	1600	1700	

Electrical Specifications (T_J = 25°C unless otherwise noted)				
Parameters	**Conditions**	**Symbol**	**Values**	**Units**
Maximum on-state average current	T_C = 85°C	I_D	100	A
Forward surge current (non-repetitive), one cycle	f = 50Hz, T_{VJ} = 25 °C	I_{FSM}, I_{TSM}	1000	A
Maximum forward voltage drop	I_T = 200A, T_{VJ} = 25°C	V_T	max. 1.75	V
Current required for fusing	f = 50Hz, T_{VJ} = 25 °C	I^2t	5000	A^2s
Maximum rate of rise of on-state current	T_{VJ} = T_{VJM}, f = 50Hz	di/dt	max. 50	A/µs
Critical rate of rise of off-state voltage	T_{VJ} = T_{VJM}	dv/dt	max. 500	V/µs
Gate voltage to trigger	T_{VJ} = 25°C	V_{GT}	min. 3	V
Gate current to trigger	T_{VJ} = 25°C	I_{GT}	min. 150	mA
Holding current	T_{VJ} = 25 °C	I_H	100	mA
Latching current	T_{VJ} = 25 °C	I_L	250	mA
RMS isolation voltage	f = 50Hz, t = 1 min	V_{ISO}	3000	V

Thermal and Mechanical Specifications (T_J = 25°C unless otherwise noted)				
Parameters		**Symbol**	**Values**	**Units**
Operating junction temperature range		T_{VJ}	- 40 to + 125	°C
Maximum storage temperature range		T_{STG}	- 40 to + 125	°C
Maximum thermal resistance, junction to case		$R_{th(J-C)}$	0.84	°C/W
Mounting torque ±10%	to heatsink	F	5	Nm
	to terminal		4	
Approximate weight		W	320	g

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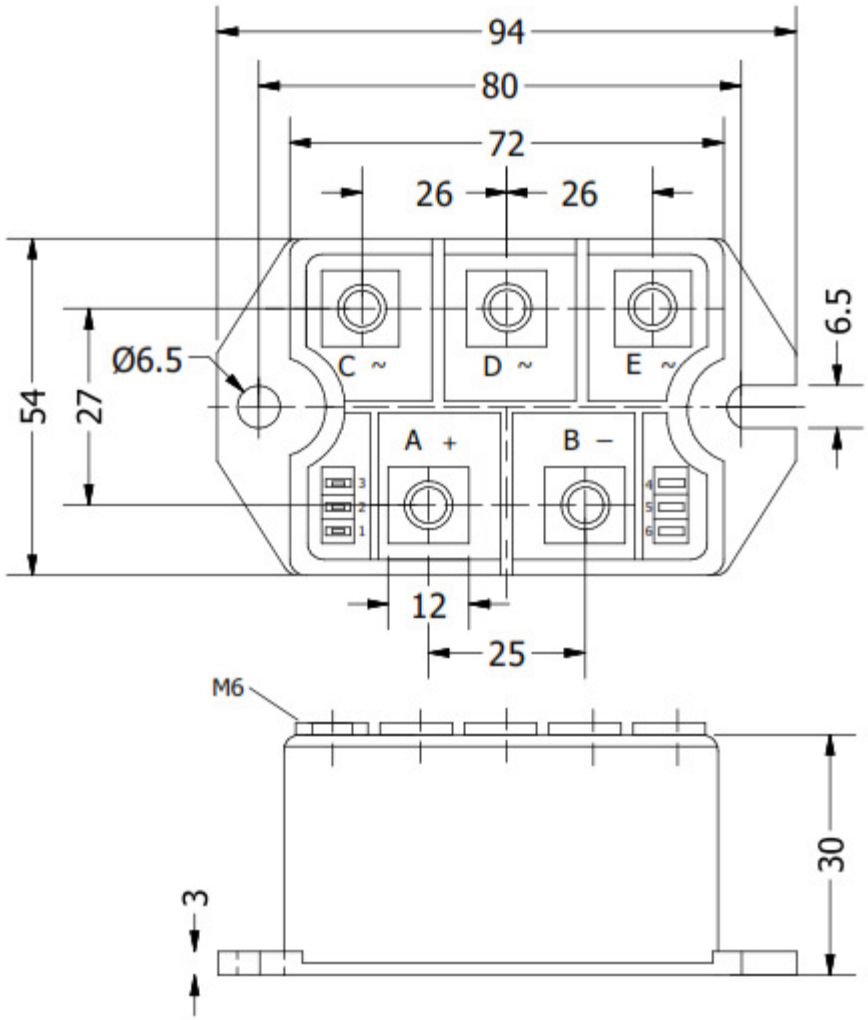
Package Outline

(All dimensions in mm)



Ordering Table

NFS	*100*	*/*	*160*
1	2		3

1 – Three-phase full-controlled bridge
2 – Current rating = I_D
3 – Voltage Code x 10 = V_{RRM} (See Voltage Ratings Table)

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