DIODE(THREE PHASES BRIDGE TYPE)

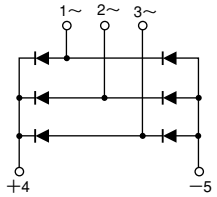
DF200AA120/160

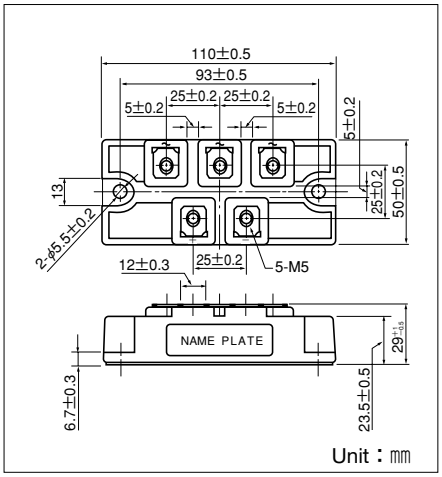
UL;E76102(M)

Power Diode Module **DF200AA** is designed for three phase full wave rectification, which has six diodes connected in a three phase bridge configuration. The mounting base of the module is electrically isolated from semiconductor elements for simple heatsink construction. Output DC current is 200Amp (Tc=96℃) Repetitive peak reverse voltage is up to 1,600V.

- TjMax=150℃
- Isolated mounting base
- High reliability by unique glass passivation

(**Applications**)
AC, DC Motor Drive/AVR/Switching
-for three phase rectification





■Maximum Ratings

(Tj=25℃ unless otherwise specified)

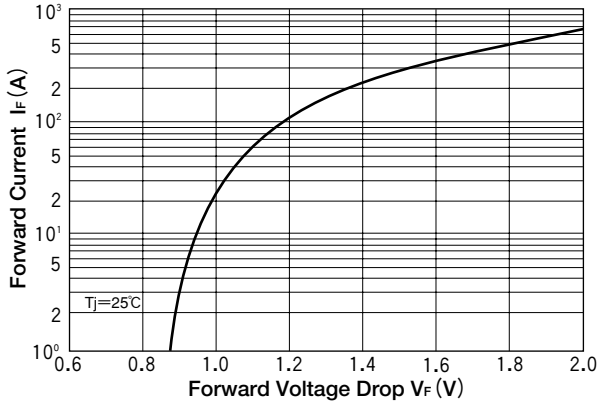
Symbol	Item	Ratings		Unit
		DF200AA120	DF200AA160	
V_{RRM}	Repetitive Peak Reverse Voltage	1200	1600	V
V_{RSM}	Non-Repetitive Peak Reverse Voltage	1300	1700	V

Symbol	Item		Conditions	Ratings	Unit
I_D	Output Current (D.C.)		Three Phase full wave. Tc=96℃	200	A
I_{FSM}	Surge Forward Current		1 cycle, 50/60Hz, peak value, non-repetitive	1850/2000	A
I^2t	I^2t		Value for one cycle of surge current	6000	A^2S
Tj	Operating Junction Temperature			−40 to +150	℃
Tstg	Storage Temperature			−40 to +125	℃
V_{ISO}	Isolation Breakdown Voltage (R.M.S.)		A.C. 1 minute	2500	V
	Mounting Torque	Mounting (M5)	Recommended Value 1.5-2.5 (15-25)	2.7 (28)	N·m (kgf·cm)
		Terminal (M5)	Recommended Value 1.5-2.5 (15-25)	2.7 (28)	
	Mass		Typical Value	360	g

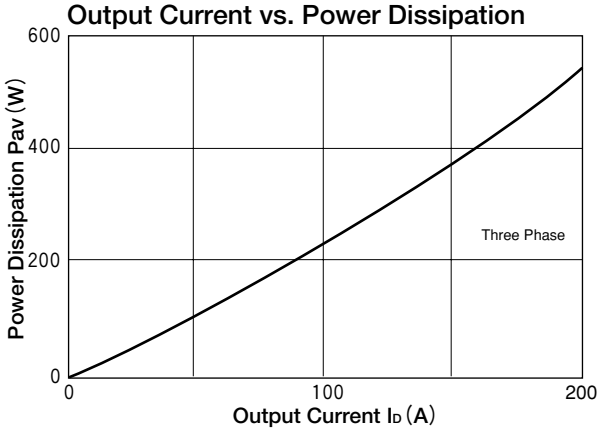
■Electrical Characteristics

Symbol	Item	Conditions	Ratings	Unit
I_{RRM}	Repetitive Peak Reverse Current, max.	Tj=150℃ at V_{RRM}	15.0	mA
V_{FM}	Forward Voltage Drop, max.	Tj=25℃, I_{FM}=200A, Inst. measurement	1.35	V
Rth(j-c)	Thermal Impedance, max.	Junction to case	0.10	℃/W

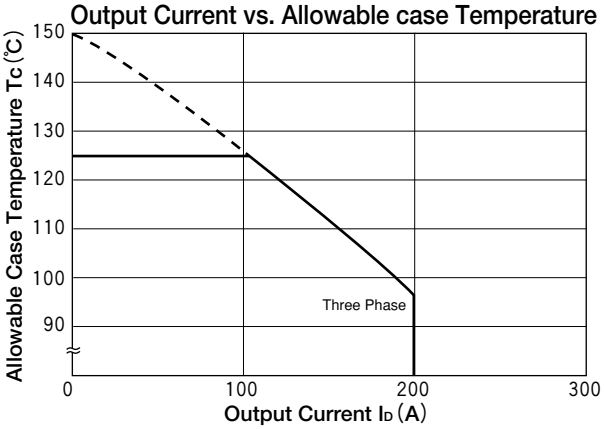
Maximum Forward Characteristics



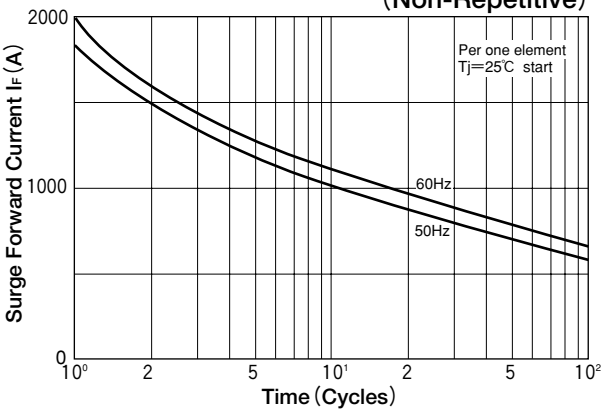
Output Current vs. Power Dissipation



Output Current vs. Allowable case Temperature



Cycle Surge Forward Current Rating (Non-Repetitive)



Transient Thermal Impedance (max)