

# DIODE(THREE PHASES BRIDGE TYPE)

# DF100AA120/160



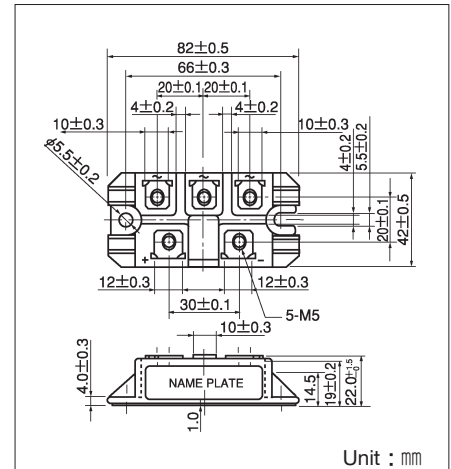
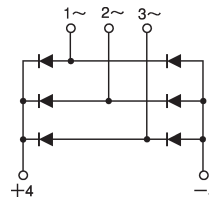
UL;E76102 (M)

Power Diode Module DF100AA 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 100Amp (Tc = 102 °C) Repetitive peak reverse voltage is up to 1,600V.

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

**(Applications)**

AC, DC Motor Drive/AVR/Switching  
-for three phase rectification



**Maximum Ratings**

(Tj=25°C)

Symbol	Item	Ratings		Unit
		DF100AA120	DF100AA160	
VRRM	Repetitive Peak Reverse Voltage	1200	1600	V
VRSM	Non-Repetitive Peak Reverse Voltage	1300	1700	V

Symbol	Item	Conditions	Ratings	Unit	
Id	Output Current (D.C.)	Three phase full wave. Tc : 102 °C	100	A	
IFSM	Surge Forward Current	1cycle, 50/60Hz, peak value, non-repetitive	910/1000	A	
I <sup>2</sup> t	I <sup>2</sup> t	Value for one cycle of surge current	4100	A <sup>2</sup> S	
Tj	Operating Junction Temperature		-40 ~ +150	°C	
Tstg	Storage Temperature		-40 ~ +125	°C	
Viso	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	160	g	

**Electrical Characteristics**

Symbol	Item	Conditions	Ratings			Unit
			Min.	Typ.	Max.	
IRRM	Repetitive Peak Reverse Current	Tj=150 °C at VRRM			15	mA
VFM	Forward Voltage Drop	Tj=25 °C, IFM=100A, Inst. measurement			1.2	V
Rth(j-c)	Thermal Impedance	Junction to case			0.2	°C/W

