DIODE(THREE PHASES BRIDGE TYPE)

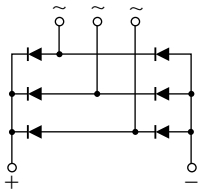
DF100BA40/80

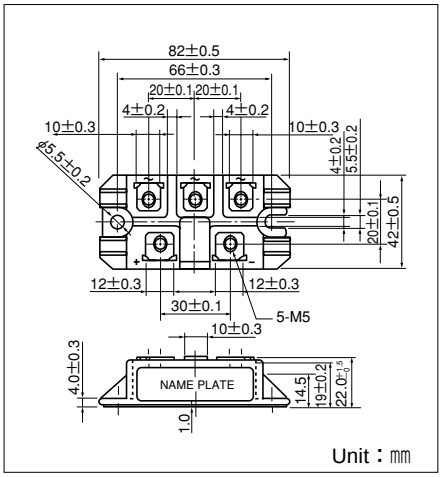
UL;E76102(M)

Power Diode Module **DF100BA** 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℃) Repetitive peak reverse voltage is up to 800V.

- 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)

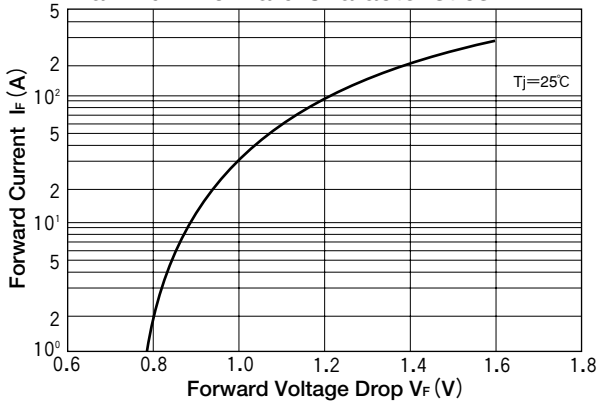
Symbol	Item	Ratings		Unit
		DF100BA40	DF100BA80	
VRRM	Repetitive Peak Reverse Voltage	400	800	V
VRSM	Non-Repetitive Peak Reverse Voltage	480	960	V

Symbol	Item		Conditions	Ratings	Unit
ID	Output Current (D.C.)		Three phase full wave. Tc=102℃	100	A
IFSM	Surge Forward Current		½cycle, 50/60Hz, Peak value, non-repetitive	910/1000	A
I²t	I²t (for fusing)		Value for one cycle of surge current	4100	A²S
Tj	Operating Junction Temperature			−40 to +150	℃
Tstg	Storage Temperature			−40 to +125	℃
VISO	Isolation Voltage		Terminal to case, AC RMS 1minute	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

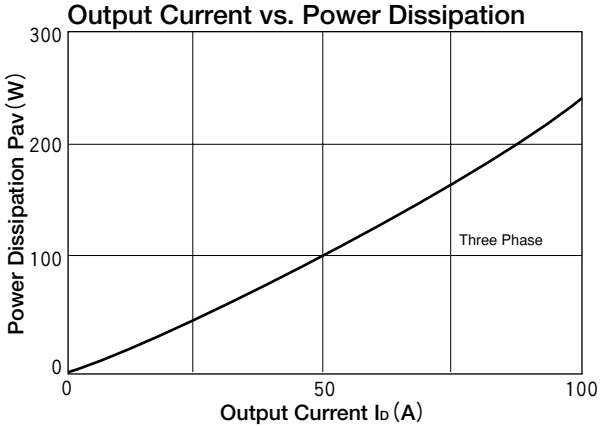
■Electrical Characteristics

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

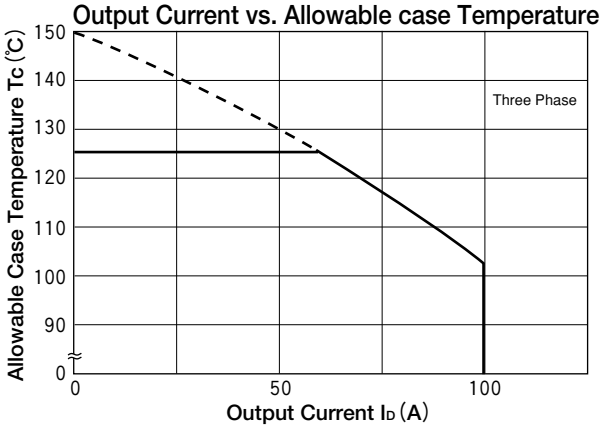
Maximum Forward Characteristics



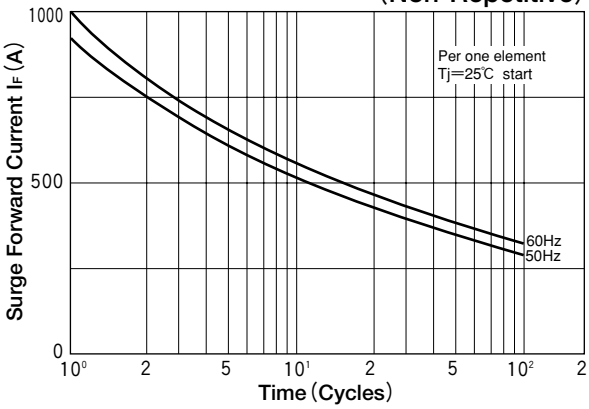
Output Current vs. Power Dissipation



Output Current vs. Allowable case Temperature



Cycle Surge Forward Current Rating (Non-Repetitive)



Transient Thermal Impedance (max)