

DF50BA40/80

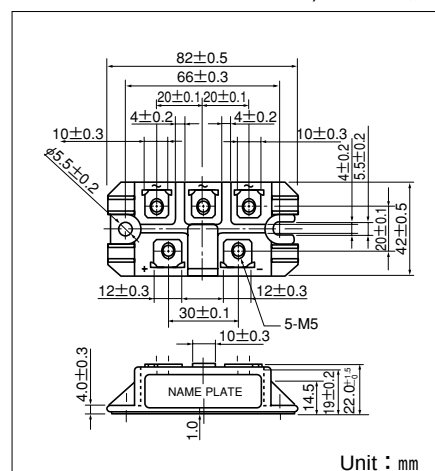
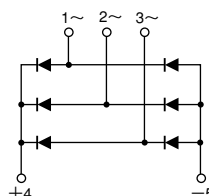
UL:E76102(M)

Power Diode Module **DF50BA** 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 50Amp ($T_c=114^{\circ}\text{C}$) Repetitive peak reverse voltage is up to 800V.

- 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

(T_j=25°C unless otherwise specified)

Symbol	Item	Ratings		Unit
		DF50BA40	DF50BA80	
V _{RRM}	Repetitive Peak Reverse Voltage	400	800	V
V _{RSM}	Non-Repetitive Peak Reverse Voltage	480	960	V

Symbol	Item		Conditions	Ratings	Unit
I _o	Output Current (D.C.)		Three phase full wave. T _c : 114℃	50	A
I _{FSM}	Surge Forward Current		1cycle, 50/60Hz, peak value, non-repetitive	640/700	A
I ² t	I ² t		Value for one cycle of surge current	2000	A²S
T _j	Operating Junction Temperature			−40 to +150	℃
T _{stg}	Storage Temperature			−40 to +125	℃
Viso	Isolation Breakdown Voltage (R.M.S.)		A.C. 1 minute	2500	V
	Mounting Torque	Monting (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.	
I _{RRM}	Repetitive Peak Reverse Current	T _j =150°C at V _{RRM}			4.0	mA
V _{FM}	Forward Voltage Drop	T _j =25°C, I _{FM} =50A, Inst measurement			1.2	V
R _{th(j-c)}	Thermal Impedance	Junction to case			0.3	°C/W

