

DIODE(THREE PHASES BRIDGE TYPE)

DF75BA40/80



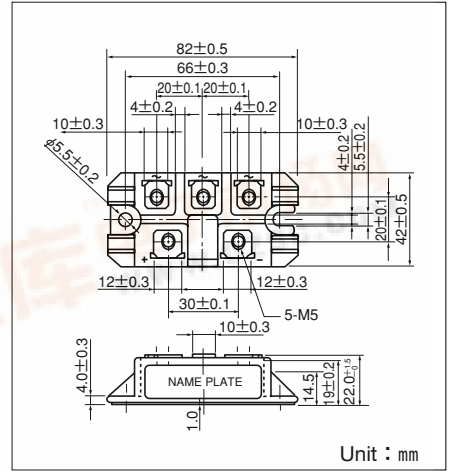
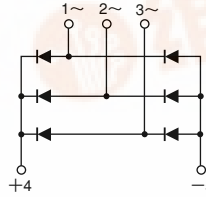
UL;E76102 (M)

Power Diode Module DF75BA 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 75Amp (Tc=107°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

(Tj=25°C unless otherwise specified)

Symbol	Item	Ratings		Unit
		DF75BA40	DF75BA80	
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=107°C	75	A	
IFSM	Surge Forward Current	1cycle, 50/60Hz, peak value, non-repetitive	910/1000	A	
I ² t	I ² t	Value for one cycle of surge current	4100	A ² S	
Tj	Operating Junction Temperature		-40 to +150	°C	
Tstg	Storage Temperature		-40 to +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	

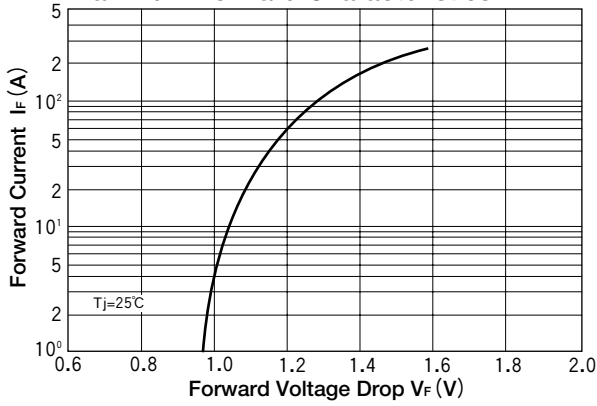
Electrical Characteristics

(Tj=25°C unless otherwise specified)

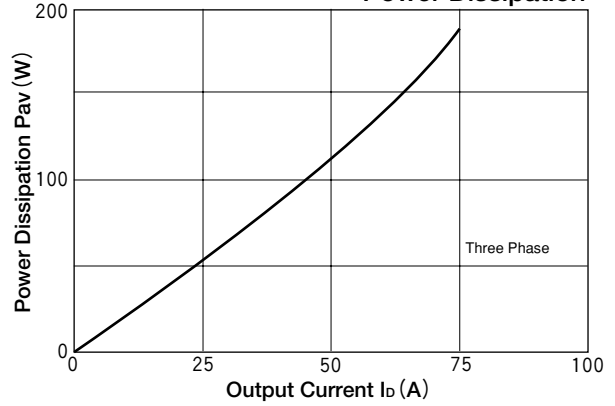
Symbol	Item	Conditions	Ratings	Unit
IRRM	Repetitive Peak Reverse Current, max.	Tj=150°C at VRRM	10.0	mA
VFM	Forward Voltage Drop, max.	Tj=25°C, IFM=75A, Inst. measurement	1.20	V
Rth(j-c)	Thermal Impedance, max.	Junction to case	0.24	°C/W



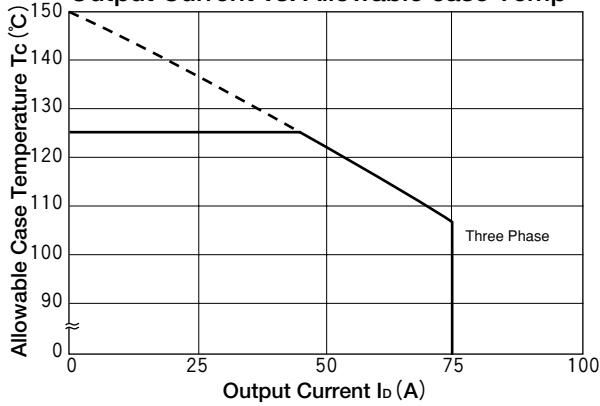
Maximum Forward Characteristics



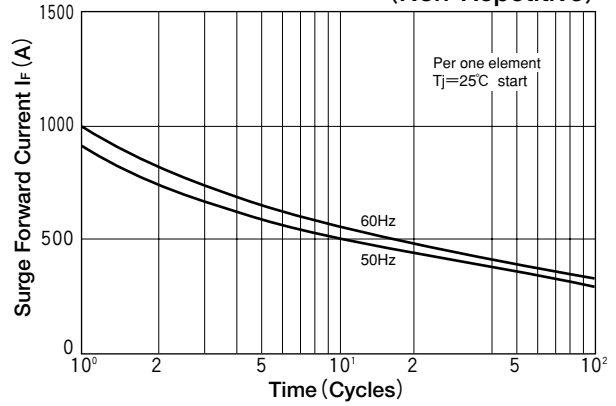
Average Forward Current vs. Power Dissipation



Output Current vs. Allowable case Temp



Cycle Surge Forward Current Rating (Non-Repetitive)



Transient Thermal Impedance (max)

