

DF75BA40/80

TOP



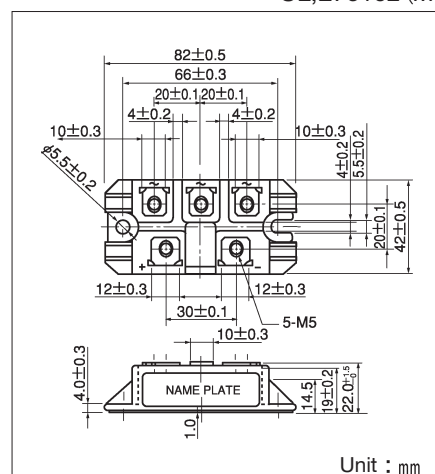
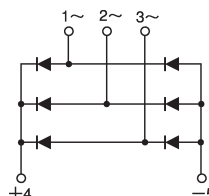
UL:E76102 (M)

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 ($T_c = 107^\circ\text{C}$) 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

($T_j=25^{\circ}\text{C}$)

Symbol	Item	Ratings		Unit
		DF75BA40	DF75BA80	
V _{RRM}	Repetitive Peak Reverse Voltage	400	800	V
V _{RSM}	Non-Repetitive Peak Reverse Voltage	480	960	V

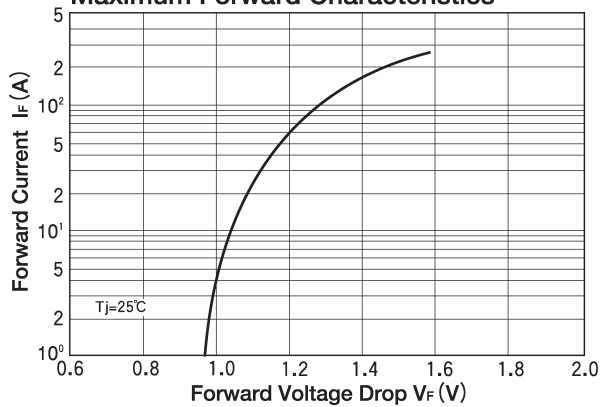
Symbol	Item		Conditions	Ratings	Unit
I _O	Output Current (D.C.)		Three Phase full wave. T _C ＝107℃	75	A
I _{FSM}	Surge Forward Current		1cycle, 50/60Hz, peak value, non-repetitive	910/1000	A
I _{pt}	I _{pt}		Value for one cycle of surge current	4100	A ² S
T _j	Operating Junction Temperature			－40～＋150	℃
T _{stg}	Storage Temperature			－40～＋125	℃
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

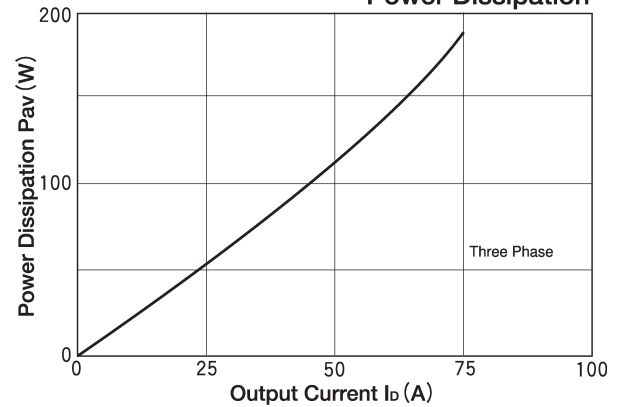
 $(T_j = 25^\circ\text{C})$

Symbol	Item	Conditions	Ratings	Unit
I_{RRM}	Repetitive Peak Reverse Current, max.	$T_j=150^{\circ}\text{C}$ at V_{RRM}	10.0	mA
V_{FM}	Forward Voltage Drop, max.	$T_j=25^{\circ}\text{C}$, $I_{FM}=75\text{A}$, Inst. measurement	1.20	V
$R_{\theta j-c}$	Thermal Impedance, max.	Junction to case	0.24	$^{\circ}\text{C/W}$

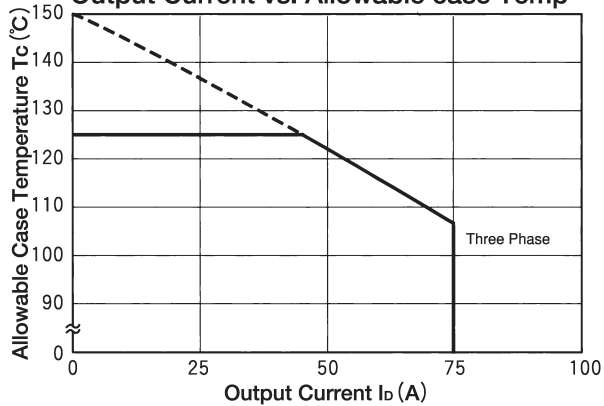
Maximum Forward Characteristics



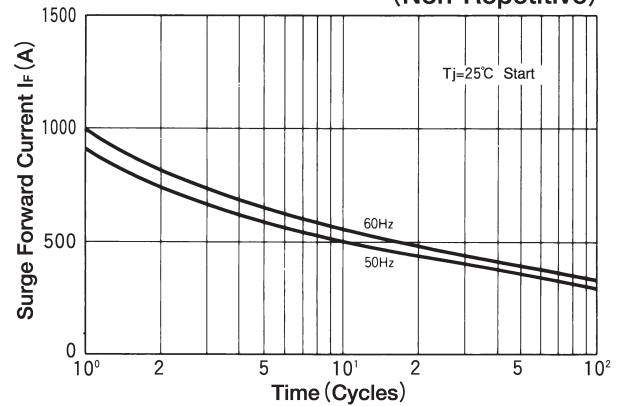
Average Forward Current vs. Power Dissipation



Output Current vs. Allowable case Temp



Cycle Surge Forward Current Rating (Non-Repetitive)



Transient Thermal Impedance (max)

