Diode Module

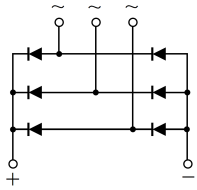
DF75BA80

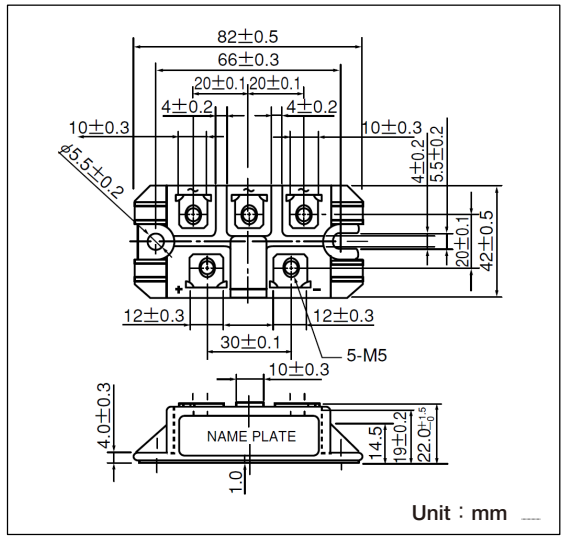
UL; E76102

《Features》
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℃） 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）

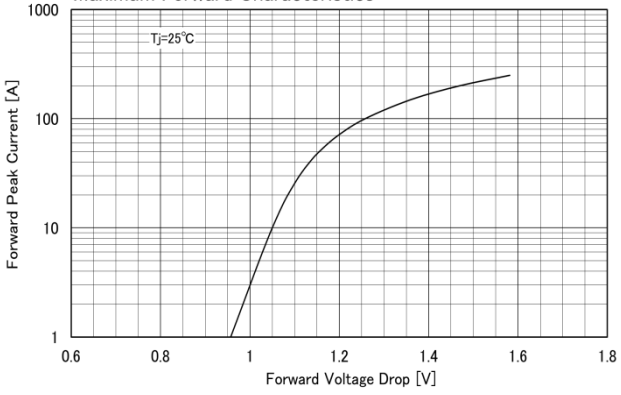
Item	Symbol	Unit	DF75BA80
Repetitive Peak Reverse Voltage	V_{RRM}	V	800
Non-Repetitive Peak Reverse Voltage	V_{RSM}	V	960

Item		Symbol	Unit	Ratings	Conditions
Output Current (D.C.)		I_D	A	75	Three phase full wave, T_C=107℃
Surge forward current		I_{FSM}	A	910/1000	1/2cycle, 50/60Hz, peak value, non-repetitive
I^2t		I^2t	A^2s	4100	Value for one cycle of surge current
Operating Junction Temperature		T_j	℃	−40 to +150	
Storage Temperature		T_{stg}	℃	−40 to +125	
Isolation Breakdown Voltage (R.M.S.)		V_{ISO}	V	2500	A.C., 1minute
Mounting Torque	Mounting (M5)		N·m (kgf·cm)	2.7(28)	Recommended Value 1.5 to 2.5 (15 to 25)
	Terminals (M5)			2.7(28)	Recommended Value 1.5 to 2.5 (15 to 25)
Mass			g	160	Typical value

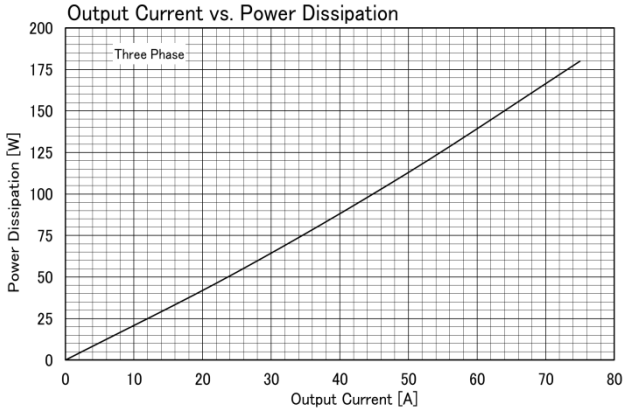
■ Electrical Characteristics （Tj=25℃ unless otherwise specified）

Item	Symbol	Unit	Ratings			Conditions
			Min.	Typ.	Max.	
Repetitive Peak Reverse Current	I_{RRM}	mA			10	T_j=150℃, V_R=V_{RRM}
Forward Voltage Drop	V_{FM}	V			1.2	I_F=75A, Inst. measurement
Thermal Resistance	$R_{th(j-c)}$	℃/W			0.24	Junction to Case

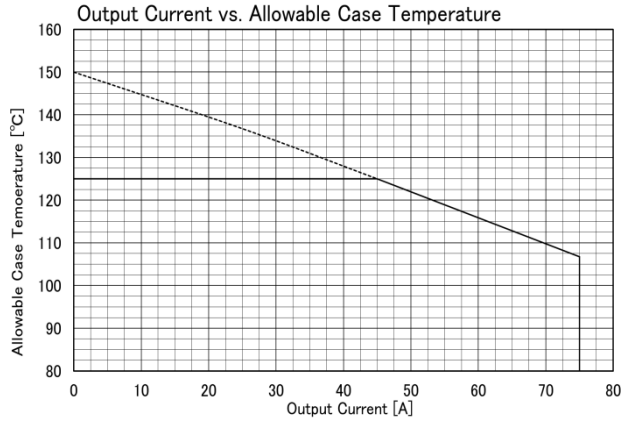
Maximum Forward Characteristics



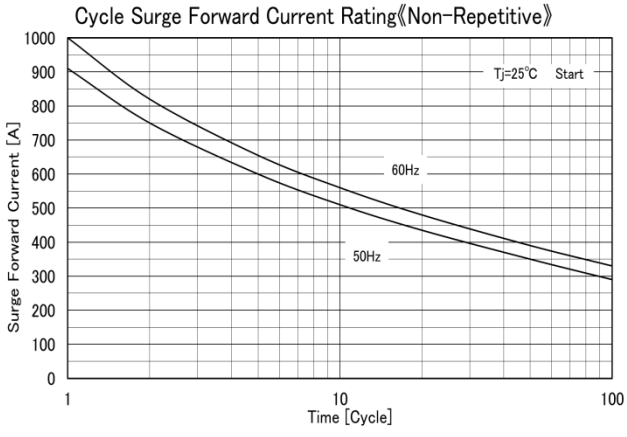
Output Current vs. Power Dissipation



Output Current vs. Allowable Case Temperature



Cycle Surge Forward Current Rating《Non-Repetitive》



Transient Thermal Impedance