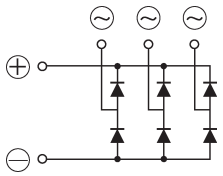
DF30DB40/80

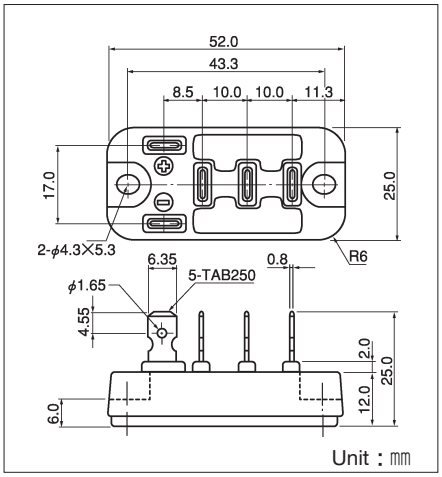
Power Diode Module **DF30DB** is designed for three phase full wave rectification, which has six diodes connected in a three phase bridge configuration. The mounting base of the module is electrically isolated from semiconductor elements for simple heatsink construction output DC current is 30Amp (Tc=83℃) Repetitive peak reverse voltage is up to 800V.

- TjMax=150℃
- Isolated Mounting Base
- High reliability by unique glass passivation
- Easy Assemble by the #250 terminal Tab

(Applications)

AC. DC Motor Drive/AVR/Switching
—for three phase rectification





■Maximum Ratings

(Tj=25℃)

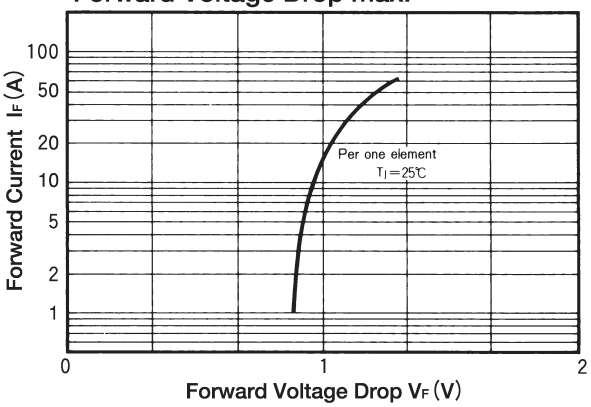
Symbol	Item	Ratings		Unit
		DF30DB40	DF30DB80	
V_{RRM}	Repetitive Peak Reverse Voltage	400	800	V
V_{RSM}	Non-Repetitive Peak Reverse Voltage	500	900	V

Symbol	Item	Conditions	Ratings	Unit
I_D	Output current (D.C.)	Three phase. full wave. T_C=83℃	30	A
I_{FSM}	Surge Forward Current	1 cycle, 50/60Hz, peak value, non-repetitive	365/400	A
Tj	Junction Temperature		−40～+150	℃
Tstg	Storage Temperature		−40～+125	℃
V_{ISO}	Isolation Breakdown Voltage (R.M.S.)	Main Terminal to case 1minute	2000	V
	Mounting Torque (Terminal M4)	Recommended Value 1.0～1.4 (10～14)	1.5 (15)	N·m (kgf·cm)
	Mass	Typical Value	32	g

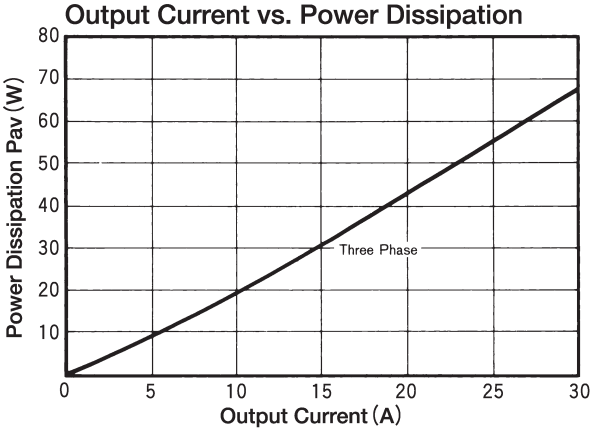
■Electrical Characteristics

Symbol	Item	Conditions	Ratings	Unit
I_{RRM}	Repetitive Peak Reverse Current, max.	Tj=150℃ at V_{RRM}	1.5	mA
V_{FM}	Forward Voltage Drop, max.	I_{FM}=30A, Tj=25℃ Inst. measurement	1.1	V
Rth(j-c)	Thermal Impedance, max.	Junction to case	1.0	℃/W

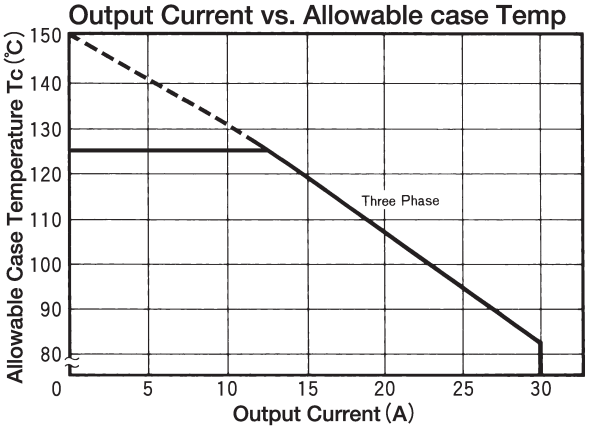
Forward Voltage Drop max.



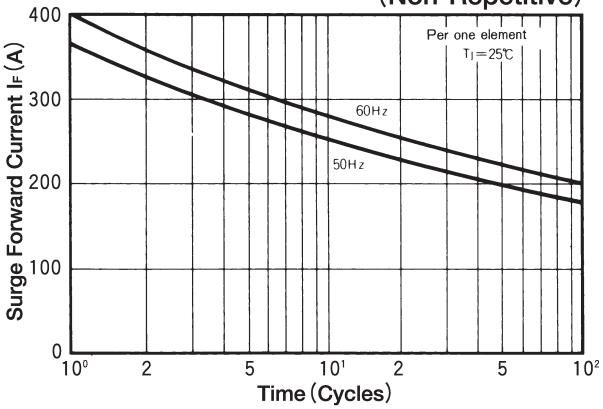
Output Current vs. Power Dissipation



Output Current vs. Allowable case Temp



Cycle Surge Forward Current Rating (Non-Repetitive)



Transient Thermal Impedance (max)