

## DIODE (THREE PHASES BRIDGE TYPE)

# DF60BA40/80

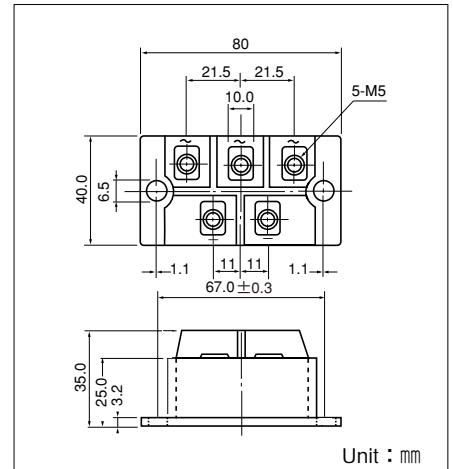
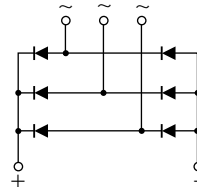
UL:E76102(M)

Power Diode Module **DF60BA** 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 60Amp ( $T_c=115^\circ\text{C}$ ) Repetitive peak reverse voltage is up to 800V.

- $T_{j\text{Max}}=150^\circ\text{C}$
- Isolated Mounting Base
- High reliability by unique glass passivation

### (Applications)

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



### Maximum Ratings

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

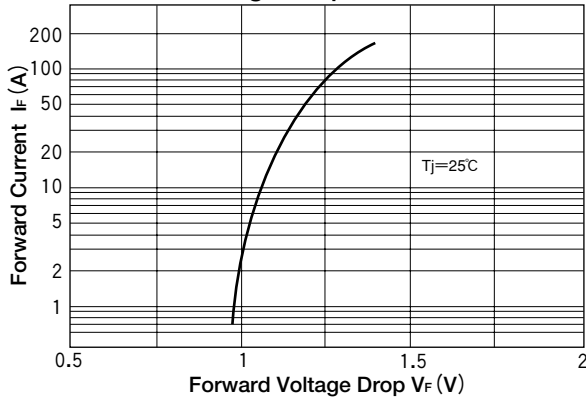
Symbol	Item	Ratings		Unit
		DF60BA40	DF60BA80	
$V_{RRM}$	Repetitive Peak Reverse Voltage	400	800	V
$V_{RSM}$	Non-Repetitive Peak Reverse Voltage	480	960	V

Symbol	Item	Conditions	Ratings	Unit	
$I_D$	Output current (D.C.)	Three phase. full wave. $T_c=115^\circ\text{C}$	60	A	
$I_{FSM}$	Surge Forward Current	$\frac{1}{2}$ cycle, 50/60Hz, Peak value, non-repetitive	910/1000	A	
$T_j$	Junction Temperature		-40 to +150	$^\circ\text{C}$	
$T_{stg}$	Storage Temperature		-40 to +125	$^\circ\text{C}$	
$V_{ISO}$	Isolation Voltage	Terminal to case, AC RMS 1minute	2500	V	
	Mounting Torque	Mounting (M6)	Recommended Value 2.5-3.9 (25-40)	4.7 (48)	N·m (kgf·cm)
		Terminal (M5)	Recommended Value 1.5-2.5 (15-25)	2.7 (28)	
	Mass	Typical Value	200	g	

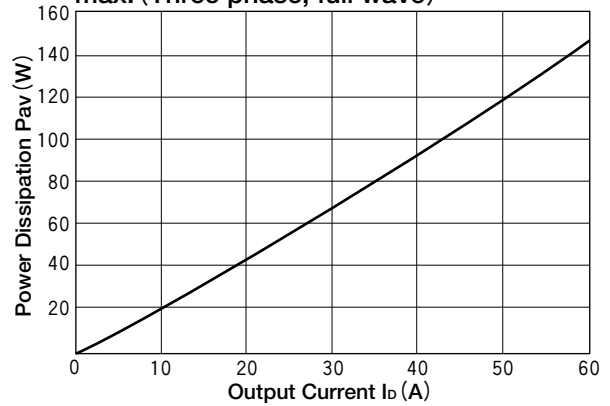
### Electrical Characteristics

Symbol	Item	Conditions	Ratings	Unit
$I_{RRM}$	Repetitive Peak Reverse Current, max.	$T_j=150^\circ\text{C}$ at $V_{RRM}$	6.0	mA
$V_{FM}$	Forward Voltage Drop, max.	$I_F=60\text{A}$ , $T_j=25^\circ\text{C}$ Inst. measurement	1.2	V
$R_{th(j-c)}$	Thermal Resistance, max.	Junction to case	0.24	$^\circ\text{C/W}$

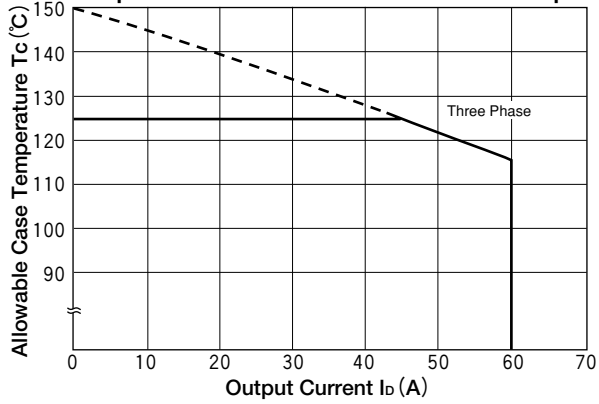
Forward Voltage Drop max.



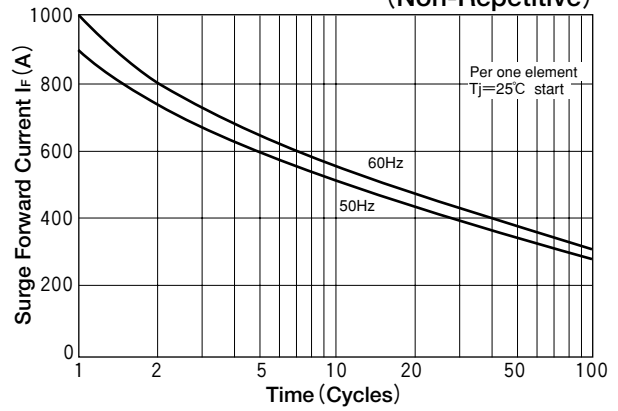
Output Current vs. Power Dissipation, max. (Three phase, full wave)



Output Current vs. Allowable case Temp



Cycle Surge Forward Current Rating (Non-Repetitive)



Transient Thermal Impedance (max)

