

DIODE(THREE PHASES BRIDGE TYPE)

DF60AA120/160

TOP



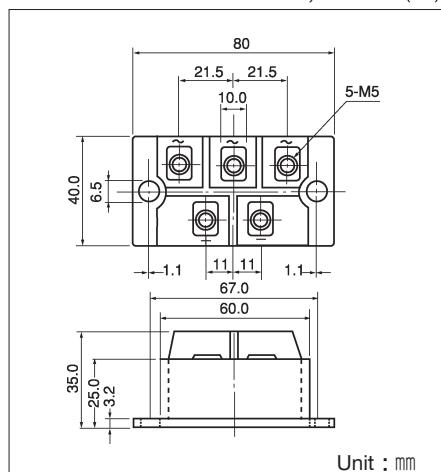
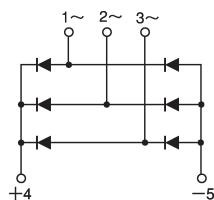
UL:E76102 (M)

Power Diode Module **DF60AA** 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 ($T_c=112^\circ\text{C}$) Repetitive peak reverse voltage is up to 1,600V.

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

(Applications)

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



Maximum Ratings

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

Symbol	Item	Ratings		Unit
		DF60AA120	DF60AA160	
V_{RRM}	Repetitive Peak Reverse Voltage	1200	1600	V
V_{RSM}	Non-Repetitive Peak Reverse Voltage	1300	1700	V

Symbol	Item	Conditions	Ratings	Unit
I_D	Output current (D.C.)	Three phase. full wave. $T_c=112^\circ\text{C}$	60	A
I_{FSM}	Surge Forward Current	1 cycle, 50/60Hz, peak value, non-repetitive	910/1000	A
T_j	Junction Temperature		-40~+150	$^\circ\text{C}$
T_{stg}	Storage Temperature		-40~+125	$^\circ\text{C}$
V_{iso}	Isolation Breakdown Voltage (R.M.S.)	Main Terminal to case 1minute	2500	V
I_{FSM}	Mounting Torque	Recommended Value 2.5~3.9 (25~40)	4.7 (48)	$\text{N} \cdot \text{m}$ (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}	12.0	mA
V_{FM}	Forward Voltage Drop, max.	$I_{FM}=60\text{A}$, $T_j=25^\circ\text{C}$ Inst. measurement	1.3	V
$R_{th(j-c)}$	Thermal Impedance, max.	Junction to case	0.24	$^\circ\text{C}/\text{W}$

