

# DIODE(THREE PHASES BRIDGE TYPE)

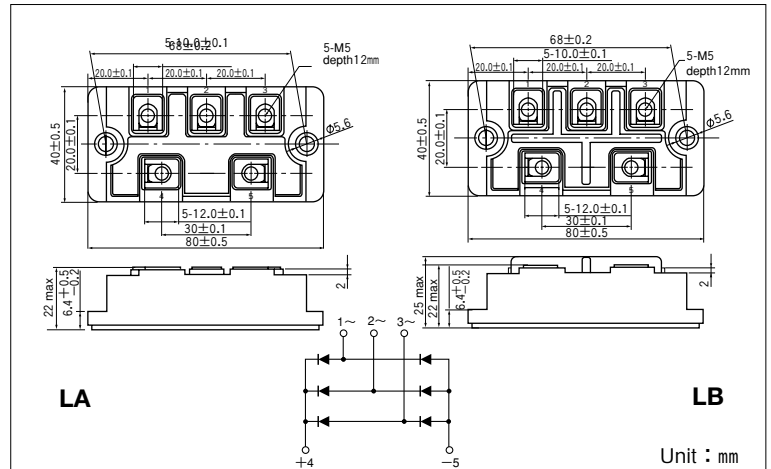
# DF100LA/LB80/160

Power Diode Module DF100LA/LB 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 100Amp (Tc=90°C) Repetitive peak reverse voltage is up to 1600V.

- TjMAX=150°C
- Isolated Mounting Base

### (Applications)

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



### Maximum Ratings

(Tj=25°C unless otherwise specified)

Symbol	Item	Ratings		unit
		DF100LA/LB80	DF100LA/LB160	
VRRM	Repetitive Peak Reverse Voltage	800	1600	V
VRSM	Non-Repetitive Peak Reverse Voltage	960	1700	V

Symbol	Item	Conditions	Ratings	unit	
Id	Output Current (D.C.)	Three phase full wave, Tc=90°C	100	A	
I <sub>FSM</sub>	Surge Forward Current	½cycle, 50/60Hz, Peak value, non-repetitive	1186/1300	A	
Tj	Operating Junction Temperature		-40 to +150	°C	
Tstg	Storage Temperature		-40 to +125	°C	
V <sub>ISO</sub>	Isolation Breakdown Voltage (R.M.S.)	A.C. 1minute	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	100	g	

### Electrical Characteristics

Symbol	Item	Conditions	Ratings	unit
I <sub>RRM</sub>	Repetitive Peak Reverse Current, max.	Tj=150°C, V <sub>R</sub> =V <sub>RRM</sub>	12	mA
V <sub>FM</sub>	Forward Voltage Drop, max.	I <sub>F</sub> =100A, Inst. measurement	1.30	V
R <sub>th(j-c)</sub>	Thermal Impedance, max.	Junction to case	0.23	°C/W

