

DIODE(THREE PHASES BRIDGE TYPE)

DF75LA/LB80/160

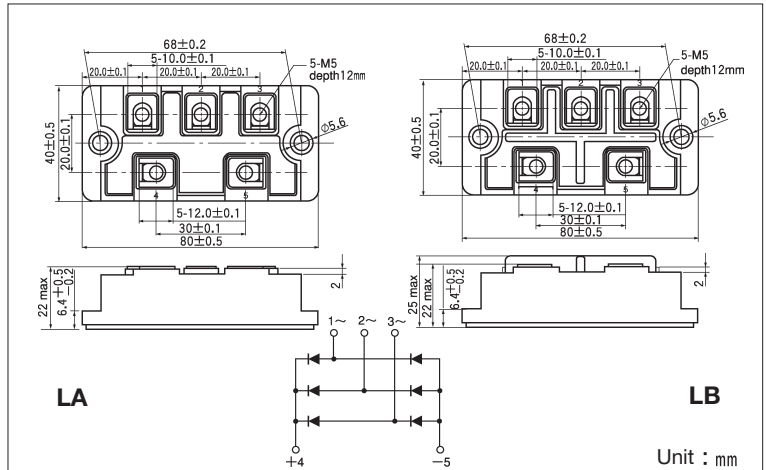


Power Diode Module DF75LA/LB is designed for three phase full wave rectification, which has six diodes connected in a three phase bridge configuration. The mounting base of the module is electrically isolated from semiconductor elements for simple heatsink construction output DC current is 75Amp ($T_c=101^\circ\text{C}$) Repetitive peak reverse voltage is up to 1600V.

- $T_{j\text{MAX}}=150^\circ\text{C}$
- Isolated Mounting Base

(Applications)

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



Maximum Ratings

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

Symbol	Item	Ratings		unit
		DF75LA/LB80	DF75LA/LB160	
V_{RRM}	Repetitive Peak Reverse Voltage	800	1600	V
V_{RSM}	Non-Repetitive Peak Reverse Voltage	960	1700	V

Symbol	Item	Conditions	Ratings	unit	
I_D	Output Current (D.C.)	Three phase full wave, $T_c=101^\circ\text{C}$	75	A	
I_{FSM}	Surge Forward Current	$1/2$ cycle, 50/60Hz, Peak value, non-repetitive	910/1000	A	
T_j	Operating Junction Temperature		$-40 \sim +150$	$^\circ\text{C}$	
T_{stg}	Storage Temperature		$-40 \sim +125$	$^\circ\text{C}$	
V_{ISO}	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_{RRM}	Repetitive Peak Reverse Current, max.	$T_j=150^\circ\text{C}$, $V_R=V_{RRM}$	8	mA
V_{FM}	Forward Voltage Drop, max.	$I_F=75\text{A}$, Inst. measurement	1.30	V
$R_{th(j-c)}$	Thermal Impedance, max.	Junction to case	0.25	$^\circ\text{C/W}$

