

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 ($T_c=90^\circ\text{C}$) Repetitive peak reverse voltage is up to 1600V.

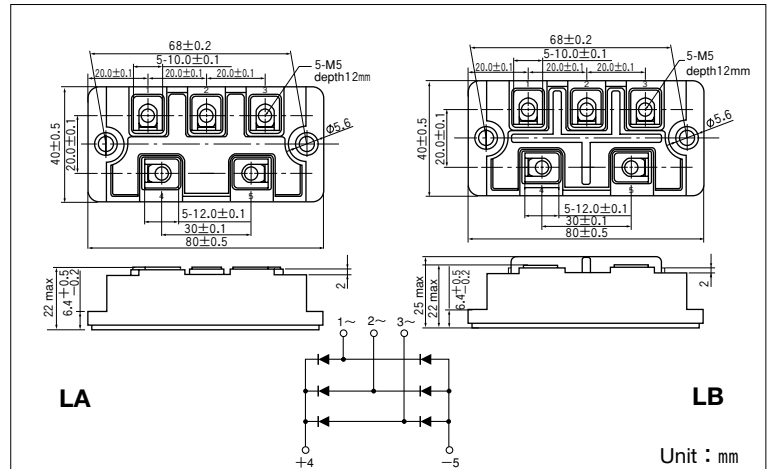
● $T_{j\text{MAX}}=150^\circ\text{C}$

● Isolated Mounting Base

(Applications)

AC. DC Motor Drive/AVR/Switching

—for three phase rectification



Maximum Ratings

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

Symbol	Item	Ratings		unit
		DF100LA/LB80	DF100LA/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, $T_c=90^\circ\text{C}$	100	A	
I_{FSM}	Surge Forward Current	$\frac{1}{2}$ cycle, 50/60Hz, Peak value, non-repetitive	1186/1300	A	
T_j	Operating Junction Temperature		-40 to +150	$^\circ\text{C}$	
T_{stg}	Storage Temperature		-40 to +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.	$T_j=150^\circ\text{C}$, $V_R=V_{RRM}$	12	mA
V_{FM}	Forward Voltage Drop, max.	$I_F=100\text{A}$, Inst. measurement	1.30	V
$R_{th(j-c)}$	Thermal Impedance, max.	Junction to case	0.23	$^\circ\text{C/W}$

