

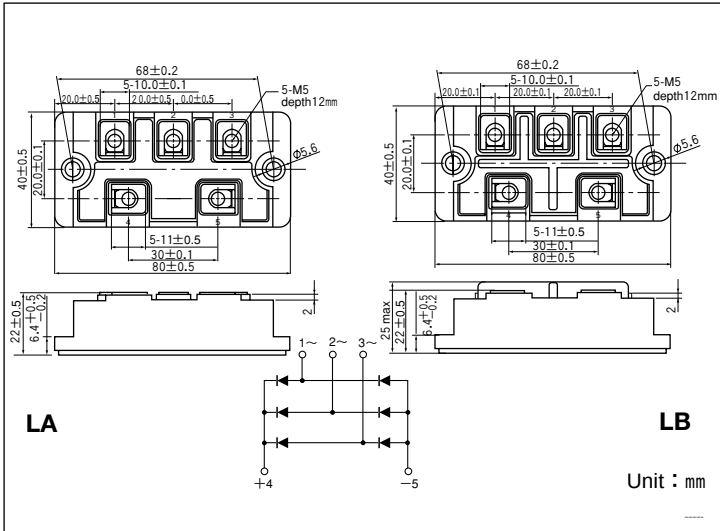
Diode Module

DF60LA/LB80/160

《Features》
Power Diode Module DF60LA/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 60Amp (Tc=111℃)
Repetitive peak reverse voltage is up to 1600V.

- TjMax = 150℃
- Isolated mounting base

《Applications》
•AC, DC Motor Drive / AVR /
Switching-for three phase rectification



Maximum Ratings (Tj=25℃ unless otherwise specified)

Item	Symbol	Unit	DF60LA/LB80	DF60LA/LB160
Repetitive Peak Reverse Voltage	V_{RRM}	V	800	1600
Non-Repetitive Peak Reverse Voltage	V_{RSM}	V	960	1700

Item	Symbol	Unit	Ratings	Conditions
Output Current (D.C.)	I_D	A	60	Three phase full wave, Tc=111℃
Surge Forward Current	I_{FSM}	A	730/800	1/2cycle, 50/60Hz, Peak value, non-repetitive
I^2t	I^2t	A ² s	2600	Value for one cycle of surge current
Operating Junction Temperature	T_j	℃	-40 to +150	
Storage Temperature	T_{stg}	℃	-40 to +125	
Isolation Breakdown Voltage(R.M.S.)	V_{ISO}	V	2500	A.C. 1minute
Mounting torque	Mounting (M5)	N·m (kgf·cm)	2.7(28)	Recommended Value 1.5 to 2.5(15 to 25)
	Terminal (M5)		2.7(28)	Recommended Value 1.5 to 2.5(15 to 25)
Mass		g	100	Typical value

Electrical Characteristics (Tj=25℃ unless otherwise specified)

Item	Symbol	Unit	Ratings	Conditions
Repetitive Peak Reverse Current	I_{RRM}	mA	8	Tj=150℃ at V_{RRM}
Forward Voltage Drop	V_{FM}	V	1.30	If=60A, Inst. measurement
Threshold Voltage	$V_{(TO)}$	V	0.85	Tj=150℃
Dynamic Resistance	r_t	mΩ	5.8	Tj=150℃
Thermal Resistance	$R_{th(j-c)}$	℃/W	0.25	Junction to case
Interface Thermal Resistance	$R_{th(c-f)}$	℃/W	0.1	Case to Heat sink Thermal conductivity(Silicon grease)≒7×10 ⁻³ [W/cm ² ·℃]

