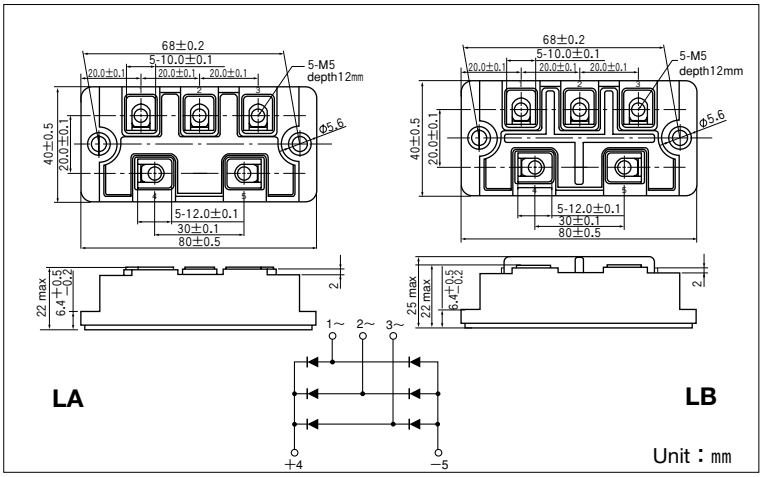
# DF75LA/LB80/160

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 (Tc=101℃) 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)

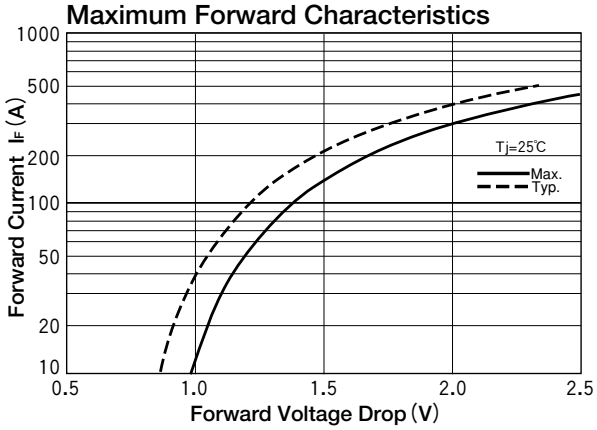
| Symbol | Item | Ratings | | unit |
|---|---|---|---|---|
| | | DF75LA/LB80 | DF75LA/LB160 | |
| VRRM | Repetitive Peak Reverse Voltage | 800 | 1600 | V |
| VRSM | Non-Repetitive Peak Reverse Voltage | 960 | 1700 | V |

| Symbol | Item | | Conditions | Ratings | unit |
|---|---|---|---|---|---|
| ID | Output Current (D.C.) | | Three phase full wave, Tc=101℃ | 75 | A |
| IFSM | Surge Forward Current | | ½cycle, 50/60Hz, Peak value, non-repetitive | 910/1000 | A |
| Tj | Operating Junction Temperature | | | −40 to +150 | ℃ |
| Tstg | Storage Temperature | | | −40 to +125 | ℃ |
| VISO | 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 |

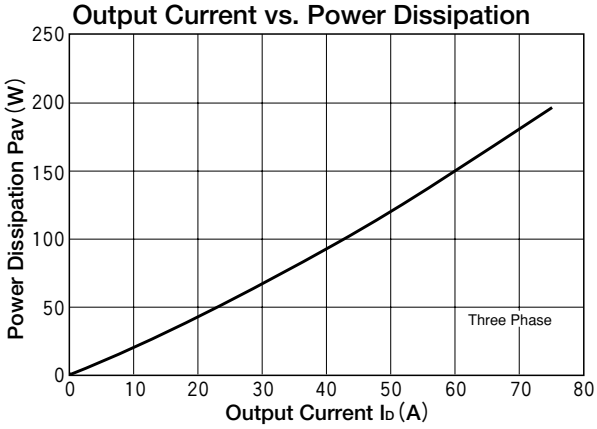
## ■Electrical Characteristics

| Symbol | Item | Conditions | Ratings | unit |
|---|---|---|---|---|
| IRRM | Repetitive Peak Reverse Current, max. | Tj=150℃, VR=VRRM | 8 | mA |
| VFM | Forward Voltage Drop, max. | IF=75A, Inst. measurement | 1.30 | V |
| Rth(j-c) | Thermal Impedance, max. | Junction to case | 0.25 | ℃/W |

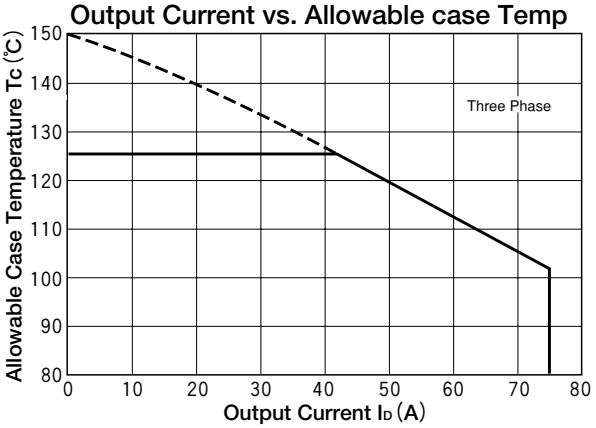
## Maximum Forward Characteristics



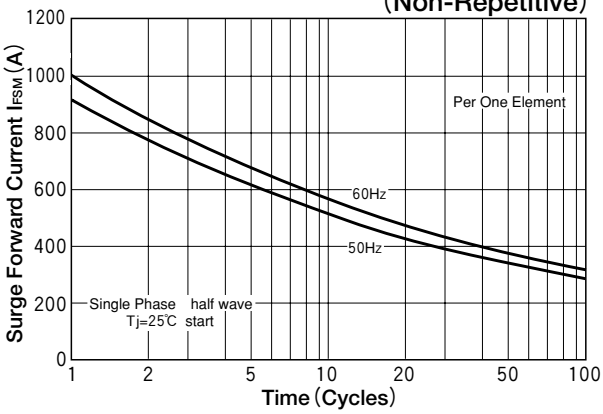

## Output Current vs. Power Dissipation




## Output Current vs. Allowable case Temp




## Cycle Surge Forward Current Rating (Non-Repetitive)




## Transient Thermal Impedance