# DIODE(THREE PHASES BRIDGE TYPE)

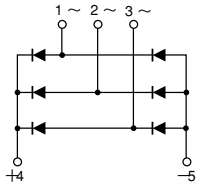
# DF100BA40/80

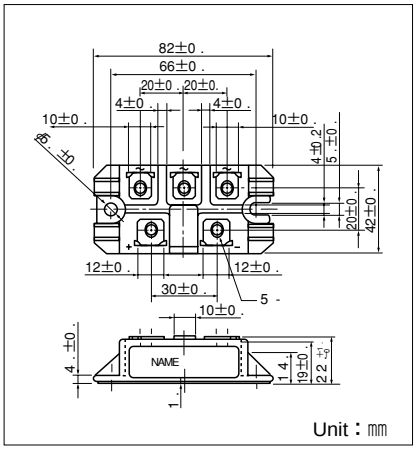
UL;E76102(M)

Power Diode Module **DF100BA** 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=102℃) Repetitive peak reverse voltage is up to 800V.

- TjMax=150℃
- Isolated mounting base
- High reliability by unique glass passivation

(**Applications**)
AC, DC Motor Drive/AVR/Switching
-for three phase rectification




## ■Maximum Ratings

(Tj= 25℃unless otherwise specified)

| Symbol | Item | Ratings | | Unit |
|---|---|---|---|---|
| | | DF100BA40 | DF100BA80 | |
| VRRM | Repetitive Peak Reverse Voltage | 400 | 800 | V |
| VRSM | Non-Repetitive Peak Reverse Voltage | 480 | 960 | V |

| Symbol | Item | | Conditions | Ratings | Unit |
|---|---|---|---|---|---|
| ID | Output Current (D.C.) | | Three phase full wave. Tc : 102℃ | 100 | A |
| IFSM | Surge Forward Current | | 1cycle, 50/60Hz, peak value, non-repetitive | 910/1000 | A |
| I²t | I²t | | Value for one cycle of surge current | 4100 | A²S |
| Tj | Operating Junction Temperature | | | −40 to +150 | ℃ |
| Tstg | Storage Temperature | | | −40 to +125 | ℃ |
| VISO | Isolation Breakdown Voltage(R.M.S.) | | A.C. 1 minute | 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 | 160 | g |

## ■Electrical Characteristics

| Symbol | Item | Conditions | Ratings | | | Unit |
|---|---|---|---|---|---|---|
| | | | Min. | Typ, | Max. | |
| IRRM | Repetitive Peak Reverse Current | Tj=150℃ at VRRM | | | 10 | mA |
| VFM | Forward Voltage Drop | Tj=25℃, IFM=100A, Inst. measurement | | | 1.2 | V |
| Rth(j-c) | Thermal Impedance | Junction to case | | | 0.2 | ℃/W |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