

FRS150BA50

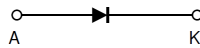
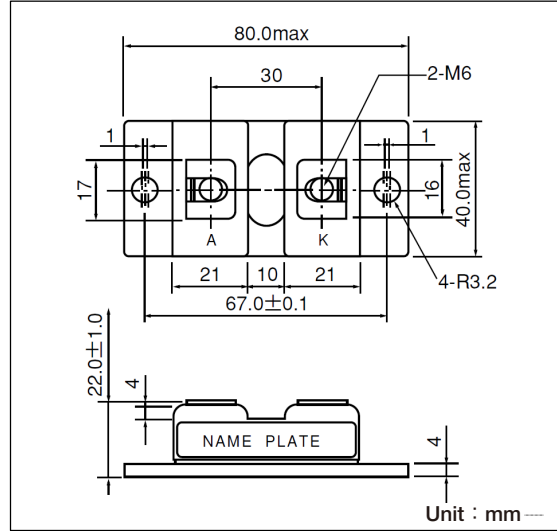
《Features》

FRS150BA is a high speed (fast recovery) isolated diode module designed for high power switching application. FRS150BA is suitable for high frequency application requiring low loss and high speed control.

- High Speed $t_{rr} \leq 200ns$
- $I_F (AV)$ 150A
- Isolated Mounting base
- High Surge Capability

《Applications》

- Inverter Welding Power Supply / Power Supply for Telecommunication / Various Switching Power Supply



■ Maximum Ratings (Tj=25°C unless otherwise specified)

| Item | Symbol | Unit | FRS150BA50 |
|---------------------------------|-------------|------|------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | V | 500 |
| Reverse D.C. Voltage | $V_{R(DC)}$ | V | 400 |

| Item | Symbol | Unit | Ratings | Conditions |
|---------------------------|-------------|------------------|-------------|--|
| Forward Current | I_F | A | 150 | D.C. Tc=85°C |
| Surge Forward Current | I_{FSM} | A | 3000 | 1/2cycle, 60Hz, Peak value, non-repetitive |
| I^2t (for fusing) | I^2t | A ² s | 37500 | Value for one cycle of surge current |
| Junction Temperature | T_j | °C | -40 to +150 | |
| Storage Temperature | T_{stg} | °C | -40 to +125 | |
| Isolation Voltage(R.M.S.) | V_{ISO} | V | 2500 | A.C. 1minute |
| Mounting torque | Mounting M6 | N·m (kgf·cm) | 4.7(48) | Recommended Value 2.5 to 3.9 (25 to 40) |
| | Terminal M6 | | 4.7(48) | Recommended Value 2.5 to 3.9 (25 to 40) |
| Mass | | g | 170 | Typical Value |

■ Electrical Characteristics (Tj=25°C unless otherwise specified)

| Item | Symbol | Unit | Ratings | | | Conditions |
|--------------------------------------|-----------|------|---------|------|------|--------------------------------|
| | | | Min. | Typ. | Max. | |
| Repetitive Peak Reverse Current | I_{RRM} | mA | | | 150 | $V_{RRM}=500V, T_j=125°C$ |
| Forward Voltage Drop | V_{FM} | V | | | 1.30 | $I_F=150A$, Inst. measurement |
| Reverse Recovery time | t_{rr} | ns | | | 200 | $I_F=150A, -di/dt=150A/\mu s$ |
| Thermal Resistance(Junction to case) | R_{th} | °C/W | | | 0.33 | |

