

2FI200A-060(2x100A)

FAST RECOVERY DIODE MODULE

600V / 100A

2 in one-package

FAST RECOVERY DIODE MODULE

■ Features

- Short Reverse Recovery Time
- Variety of Connection Menu
- Insulated Type

■ Applications

- Arc-Welders
- Free-Wheeling Diode
- High Speed Rectifiers

■ Maximum ratings and characteristics

● Absolute maximum ratings

| Item | Symbol | Conditions | Rating | Unit |
|-------------------------------------|-------------|---|---------------|------------------|
| Repetitive peak reverse voltage | V_{RRM} | | 600 | V |
| Non-repetitive peak reverse voltage | V_{RSM} | | 650 | V |
| Average output current | $I_{F(AV)}$ | 50/60Hz Square wave, $T_c=73^\circ\text{C}$ | 2 x 200 | A |
| Surge current | I_{FSM} | From rated load, Sine wave 10ms | 3200 | A |
| I^2t | I^2t | From rated load | 40000 | A ² s |
| Operating junction temperature | T_j | | -40 to +150 | °C |
| Storage temperature | T_{stg} | | -40 to +150 | °C |
| Isolation voltage | V_{is} | | AC1500(1min.) | V |
| Screw torque | Terminals | (M8) | 8.0 *1 | N·m |
| | Mountings | (M5) | 3.5 *2 | N·m |

*1: Recommendable value : 6.5 to 7.5 N·m(M5) *2: Recommendable value : 2.5 to 3.0 N·m(M5)

● Electrical characteristics (Ta=25°C Unless otherwise specified)

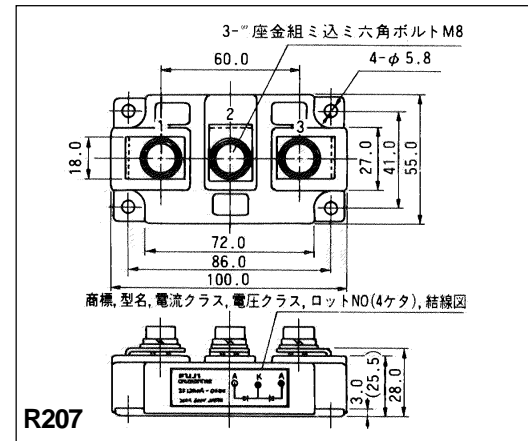
| Item | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|-----------------------|-----------|--|------|------|------|------|
| Forward voltage drop | V_{FM} | $T_j=25^\circ\text{C}$, $I_{FM}=200\text{A}$ | | | 1.25 | V |
| Reverse current | I_{RRM} | $T_j=125^\circ\text{C}$, $V_R=V_{RRM}$ | | | 120 | mA |
| Reverse recovery time | t_{rr} | $T_j=25^\circ\text{C}$, $I_F=I_R=0.1\text{A}$ | | | 0.5 | μs |

● Thermal Characteristics

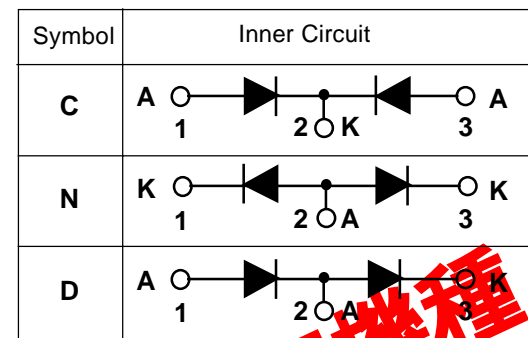
| Item | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|--------------------|---------------|---------------------------|------|------|------|------|
| Thermal resistance | $R_{th(j-c)}$ | Junction to case | | | 0.12 | °C/W |
| | $R_{th(c-f)}$ | the base to cooling fin * | | | 0.05 | °C/W |

* : With Thermal Compound

■ Outline Drawings, mm



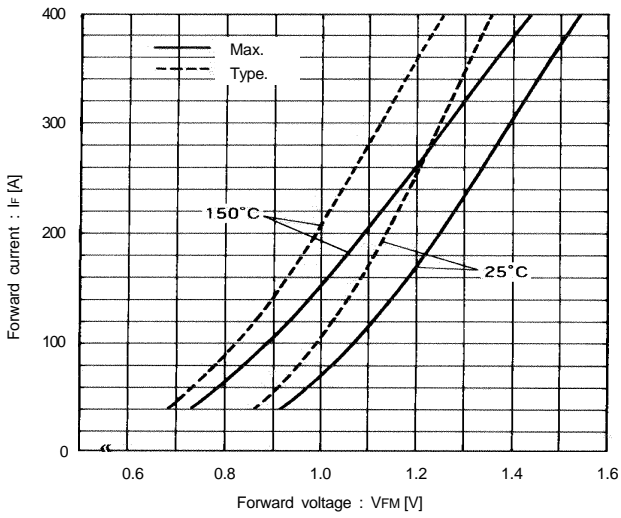
■ Inner Circuit Schematic



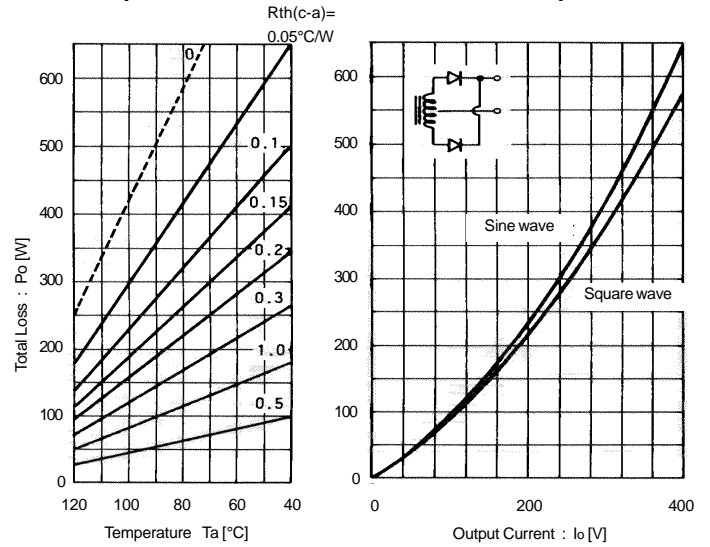
2007年3月 保守廃止予定機種
 This product is scheduled to be obsolete on march 2007.
 Not recommend for new design.

■ Characteristics

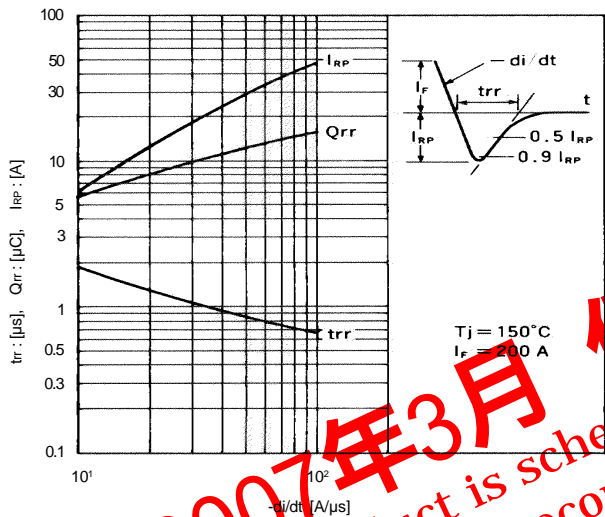
Forward Characteristics



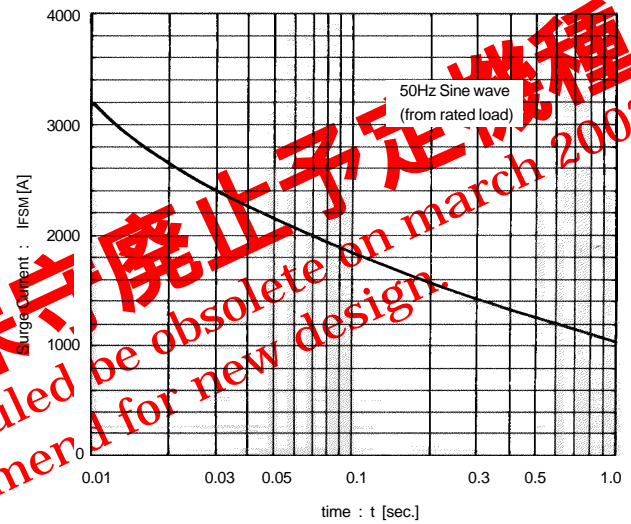
Output Current - Total Loss - Ambient Temperature



Reverse Recovery Characteristics



Surge Current



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Transient Thermal Impedance

