

Diode Module

1600V / 75A

■ Features

- Compact Package
- P.C. Board Mount Module
- Converter Diode Bridge

■ Applications

- Inverter for Motor Drive
- AC and DC Servo Drive Amplifier
- Uninterruptible Power Supply

■ Maximum ratings and characteristics

● Absolute maximum ratings (Tc=25°C unless without specified)

| Item | Symbol | Condition | Rating | Unit |
|-------------------------------------|------------------|--------------------------------|-------------|------------------|
| Repetitive peak reverse voltage | V _{RRM} | | 1600 | V |
| Non-repetitive peak reverse voltage | V _{RSM} | | 1760 | V |
| Average output current | I _o | 50Hz/60Hz sine wave Tc=97°C | 75 | A |
| One cycle surge current | I _{FSM} | From rated load | 600 | A |
| P _t | P _t | From rated load | 1440 | A ² s |
| Operation junction temperature | T _j | | -40 to +125 | °C |
| Storage junction temperature | T _{stg} | | -40 to +125 | °C |
| Isolation voltage | V _{iso} | AC : 1 minute | 3000 | V |
| Mounting screw torque | | M5 screw | 2.0 to 2.5 | N·m |

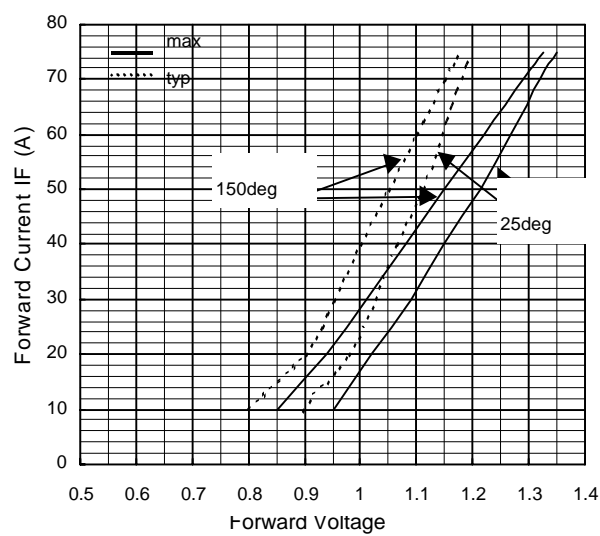
● Electrical characteristics (Tj=25°C unless otherwise specified)

| Item | Symbol | Condition | Min. | Typ. | Max. | Unit |
|-----------------|------------------|--|------|------|------|------|
| Fofward voltage | V _{FM} | Tj=25°C, I _{FM} =75A | | | 1.35 | V |
| Reverse current | I _{RRM} | Tj=150°C, V _R =V _{RRM} | | | 15 | mA |

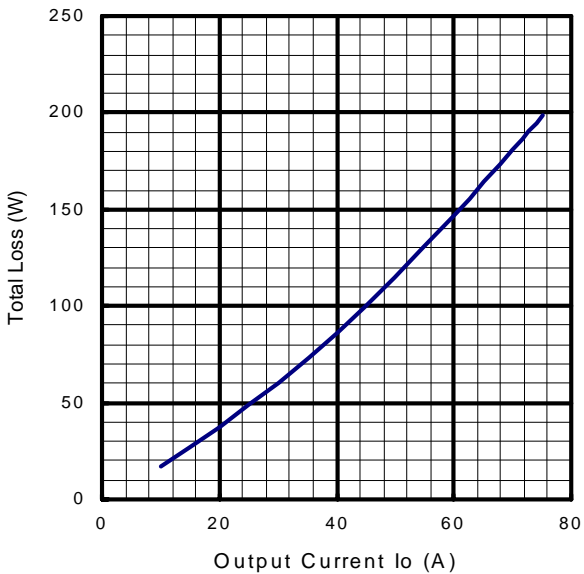
● Thermal characteristics

| Item | Symbol | Condition | Min. | Typ. | Max. | Unit |
|----------------------------------|----------------------|-----------------------|------|------|------|------|
| Thermal resistance | R _{th(j-c)} | Per total loss | | | 0.16 | °C/W |
| | | Per each device | | | 0.96 | |
| Thermal Resistance(Case to fine) | R _{th(c-f)} | with thermal compound | | | 0.08 | °C/W |

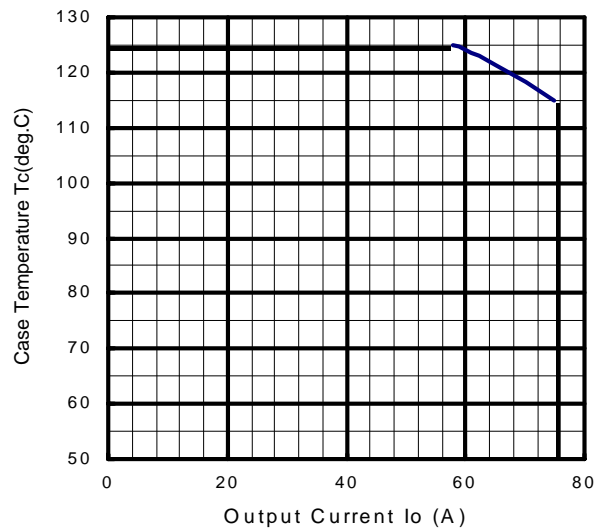
Forward Characteristics



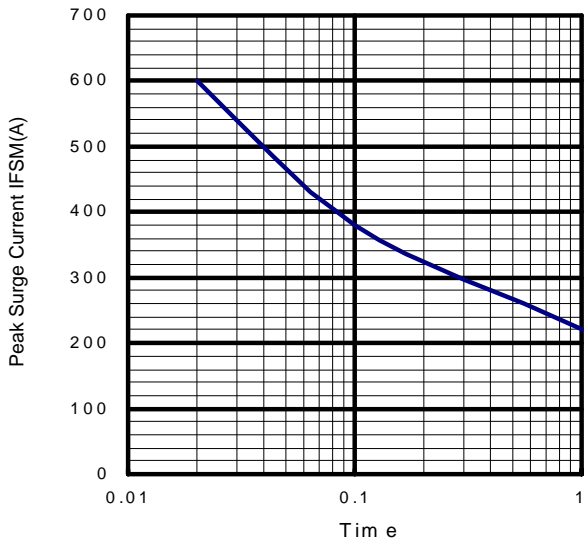
Output Current - Total Loss



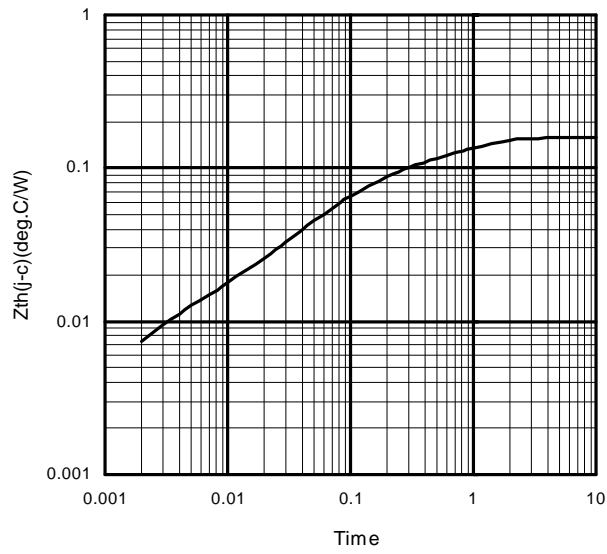
Output Current - Case Temperature



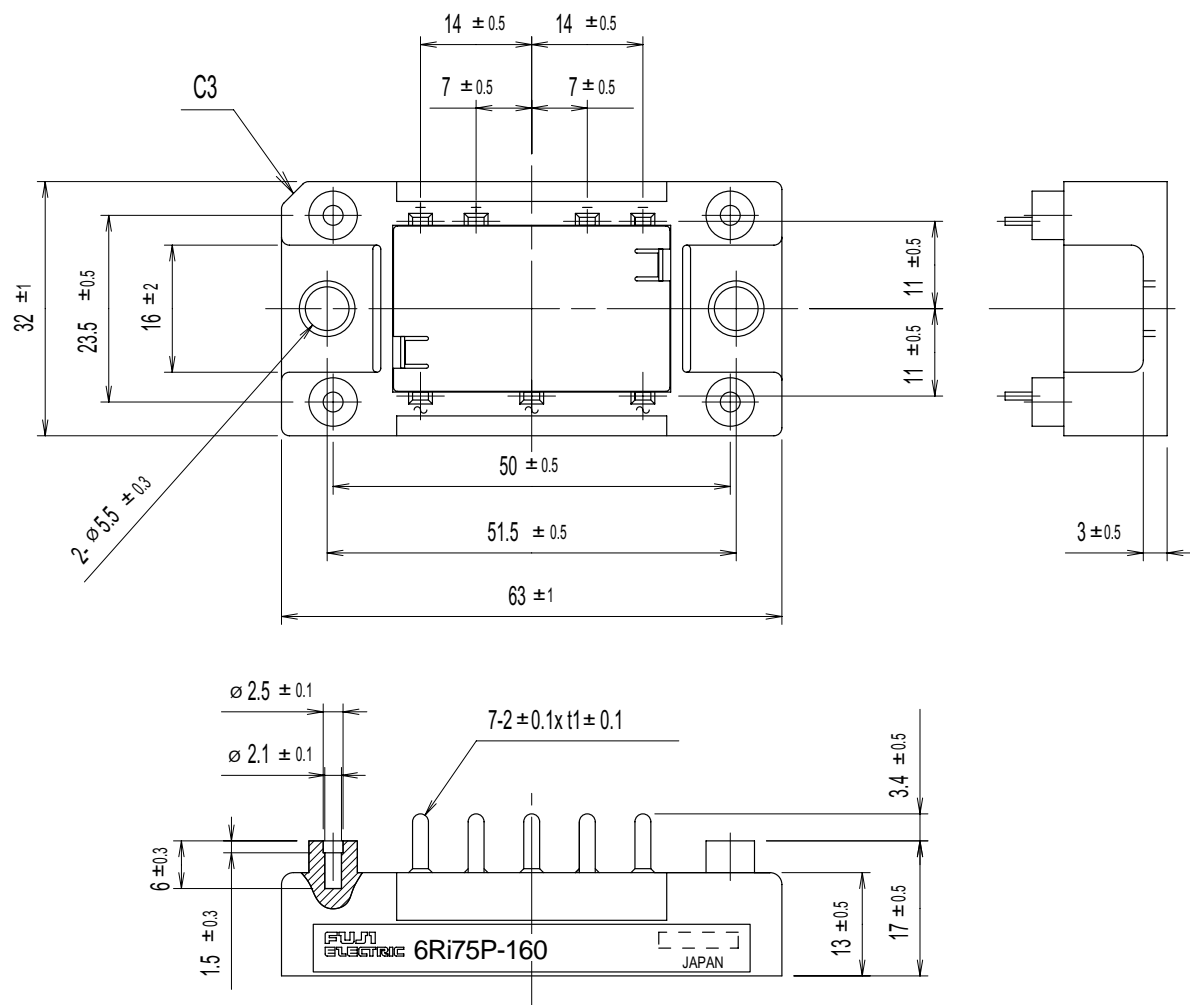
Surge C current



Transient Thermal Impedance



■ Outline Drawings, mm



■ Equivalent Circuit Schematic

