

FMG-06J

Ultra fast Plastic Power Rectifiers

VOLTAGE: 600V

CURRENT: 6.0A



FEATURE

- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes
- Ultra fast recovery time for high efficiency
- Excellent high temperature switching
- Glass passivated junction
- High voltage and high reliability
- High speed switching
- Low forward voltage

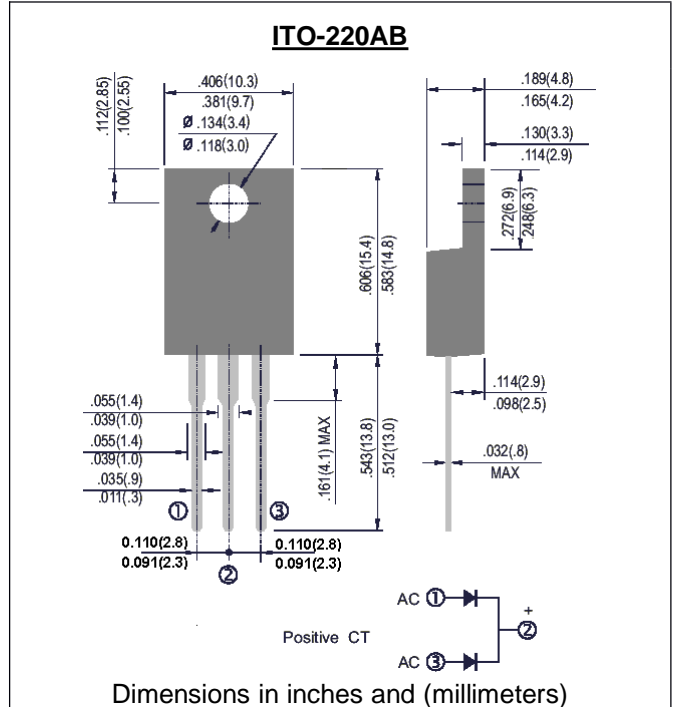
MECHANICAL DATA

Case: JEDEC TO-220 molded plastic body over passivated chip

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

| | SYMBOL | FMG-06J | units |
|---|-----------------------------------|-------------|----------|
| Maximum Recurrent Peak Reverse Voltage | V _{rrm} | 600 | V |
| Maximum RMS Voltage | V _{rms} | 420 | V |
| Maximum DC blocking Voltage | V _{dc} | 600 | V |
| Maximum Average Forward Rectified at T _c = 100°C | I _{f(av)} | 6.0 | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | I _{fsm} | 90 | A |
| Maximum Forward Voltage at Forward Current 3A and 25°C | V _f | 2.2 | V |
| Maximum Reverse Recovery Time (Note 1) | T _{rr} | 35 | nS |
| Typical thermal resistance junction to case | R _{th(jc)} | 5.0 | °C/W |
| Maximum DC Reverse Current T _a = 25°C at rated DC blocking voltage T _a = 125°C | I _r | 10 100 | μA μA |
| Storage and Operating Temperature Range | T _{stg} , T _j | -55 to +150 | °C |

Note:

1. Reverse Recovery Condition I_f = 0.5A, I_r = 1.0A, I_{rr} = 0.25A

Fig. 1 – Forward Current Derating Curve

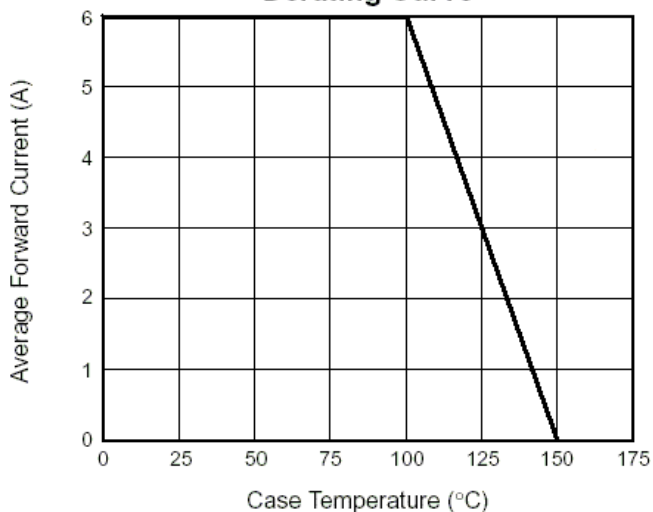


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

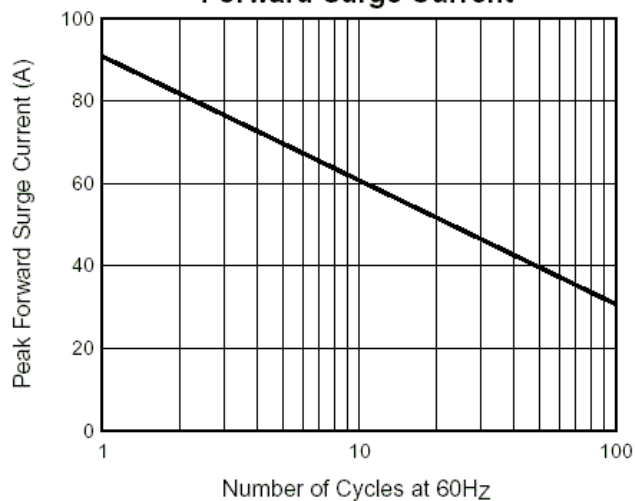


Fig. 3 – Typical Reverse Current

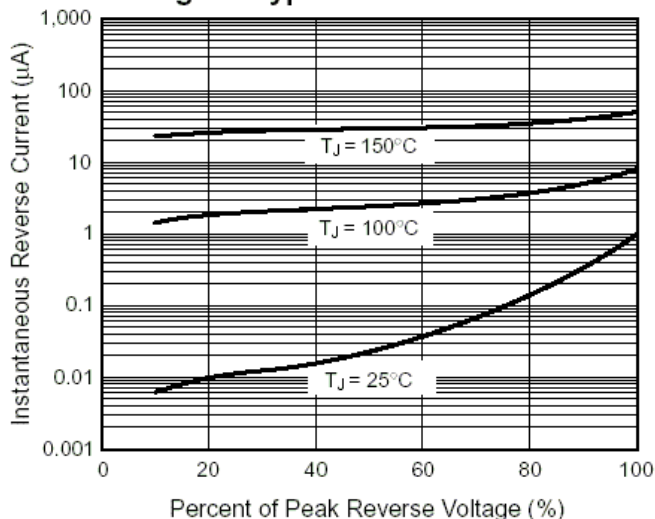


Fig. 4 – Typical Forward Voltyage

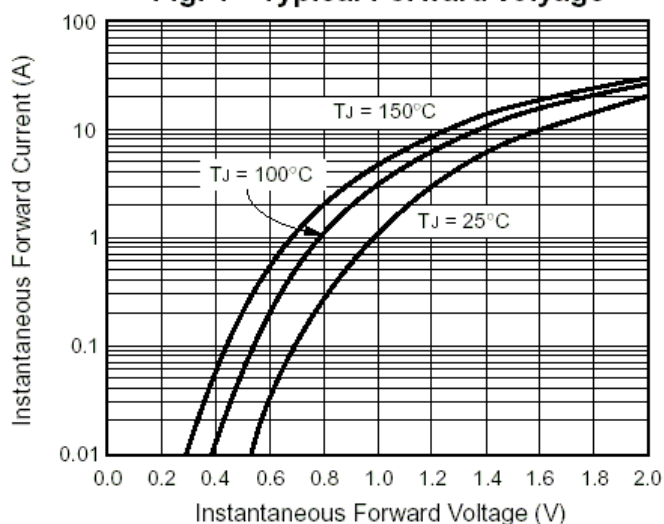


Fig. 5 – Typical Junction Capacitance

