UESP05J

Ultra fast Plastic Power Rectifiers

VOLTAGE: 600V

CURRENT: 5.0A

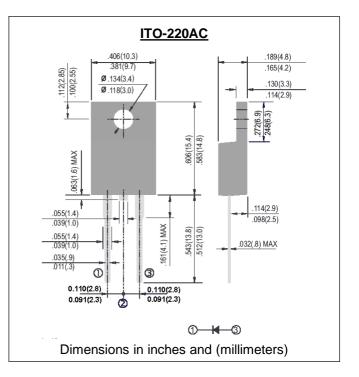


- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes
- Ultra fast recovery time for high efficiency
- Excellent high temperature switching
- Glass passivated junction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

GULF SEMI



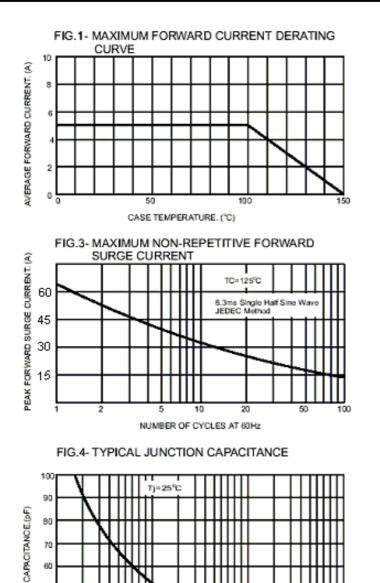
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| | SYMBOL | UESP05J | units |
|--|----------|-------------|----------|
| Maximum Recurrent Peak Reverse Voltage | Vrrm | 600 | V |
| Maximum RMS Voltage | Vrms | 420 | V |
| Maximum DC blocking Voltage | Vdc | 600 | V |
| Maximum Average Forward Rectified at Tc =100°C | lf(av) | 5.0 | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | lfsm | 70 | A |
| Maximum Forward Voltage at rated Forward Current and 25°C at 5A | Vf | 2.3 | V |
| Maximum Reverse Recovery Time (Note 1) | Trr | 35 | nS |
| Typical thermal resistance junction to case | R θ Jc | 5.0 | °C/W |
| Maximum DC Reverse CurrentTa = $25^{\circ}C$ at rated DC blocking voltageTa = $125^{\circ}C$ | Ir | 10 100 | μΑ μΑ |
| Storage and Operating Temperature Range | Tstg, Tj | -55 to +150 | °C |

Note:

1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A



RATINGS AND CHARACTERISTIC CURVES UESP05J

FIG.2 - TYPICAL REVERSE CHARACTERISTICS

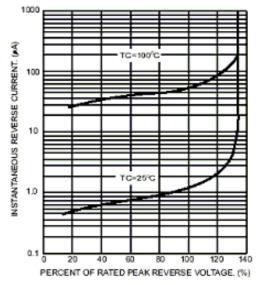
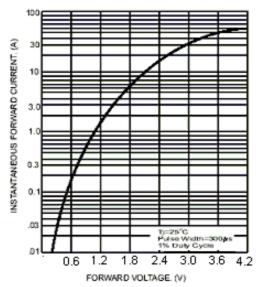


FIG.5- TYPICAL FORWARD CHARACTERISTICS



50

2

5

10 20

50

REVERSE VOLTAGE. (V)

100 200

500