UESP05J

Ultra fast Plastic Power Rectifiers

VOLTAGE: 600V

CURRENT: 5.0A

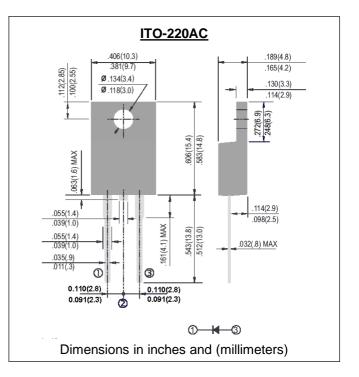


- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes
- Ultra fast recovery time for high efficiency
- Excellent high temperature switching
- Glass passivated junction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



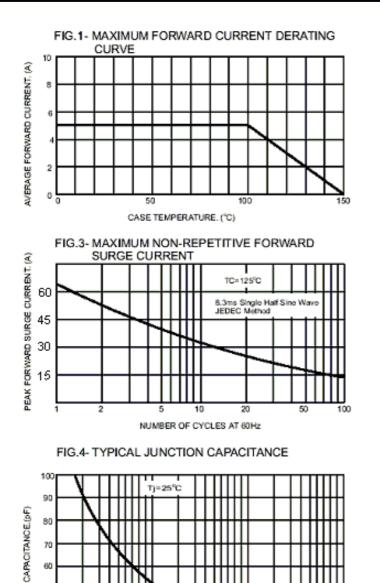
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(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

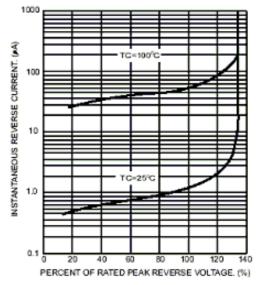
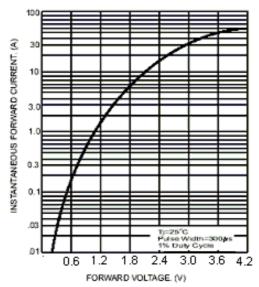


FIG.5- TYPICAL FORWARD CHARACTERISTICS



50

2

5

10 20

50

REVERSE VOLTAGE. (V)

100 200

500