

UESP08K

Ultra fast Plastic Power Rectifiers

VOLTAGE: 800V

CURRENT:8.0A



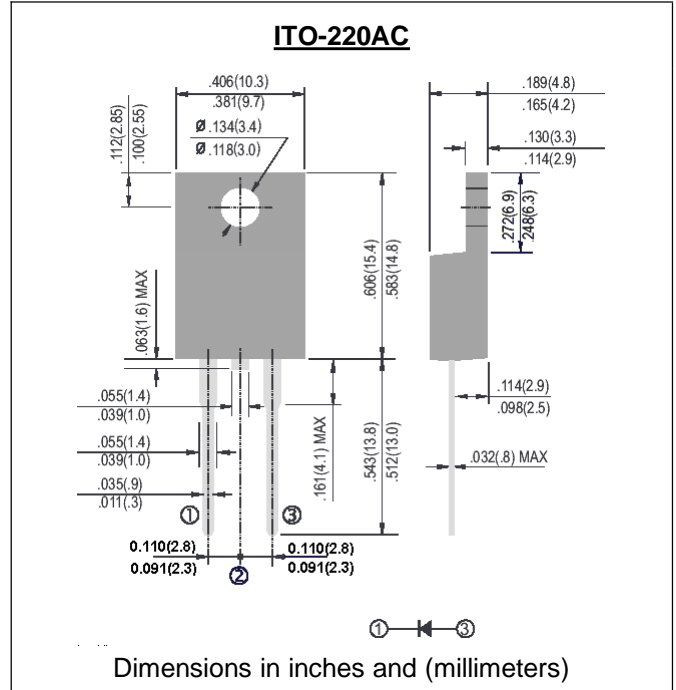
FEATURE

- 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 ITO-220AC molded plastic body over passivated chip
 Terminals: Plated Insert leads, solderable per MIL-STD-750, Method 2026

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	UESP08K	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	800	V
Maximum RMS Voltage	V _{rms}	560	V
Maximum DC blocking Voltage	V _{dc}	800	V
Maximum Average Forward Rectified at T _c =100°C	I _{f(av)}	8.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	120	A
Maximum Forward Voltage at rated Forward Current	V _f	1.5	V
Maximum Reverse Recovery Time (Note 1)	T _{rr}	35	nS
Typical thermal resistance junction to case	R _{θ Jc}	5.0	°C/W
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I _r	10 500	μA μA
Storage and Operating Temperature Range	T _{stg, Tj}	-55 to +150	°C

Note:

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

RATINGS AND CHARACTERISTIC CURVES UESP08K

FIG. 1 - FORWARD CURRENT DERATING CURVE

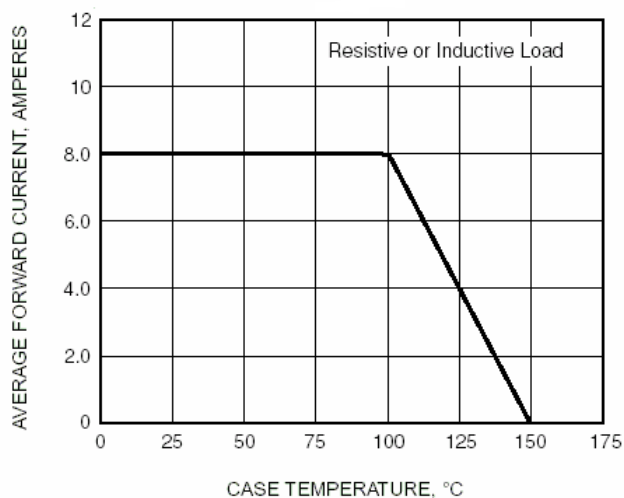


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

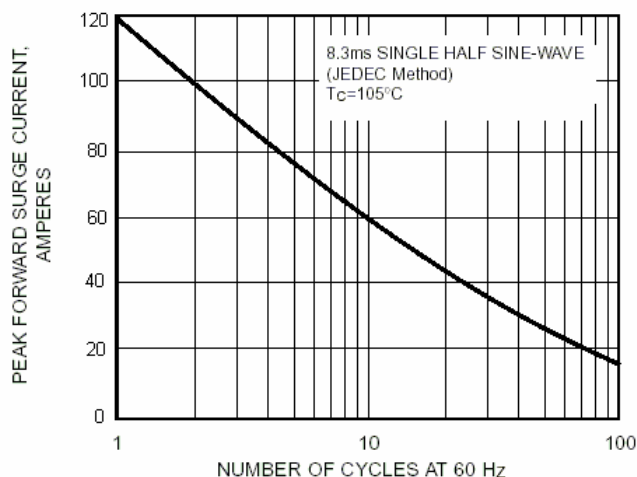


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

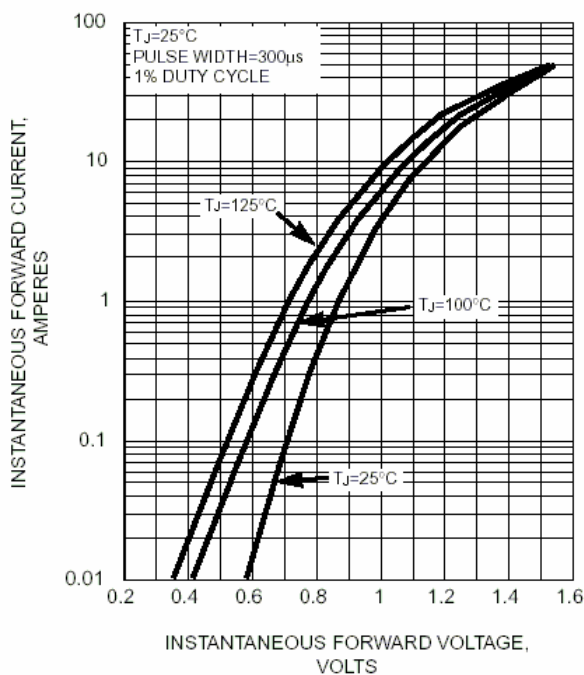


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

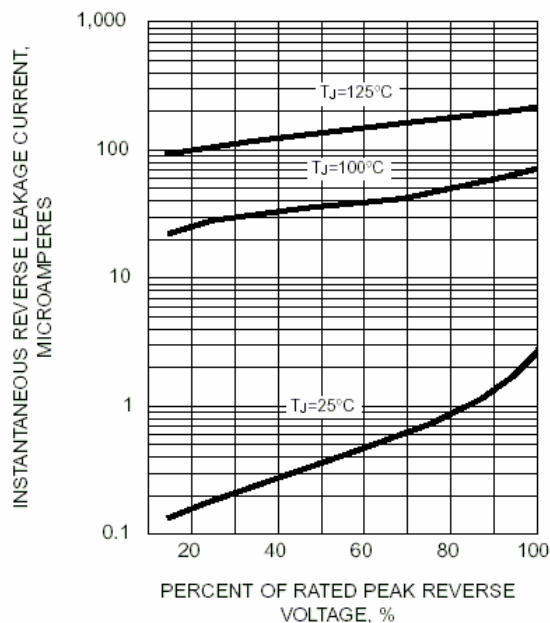


FIG. 5 - REVERSE SWITCHING CHARACTERISTICS PER LEG

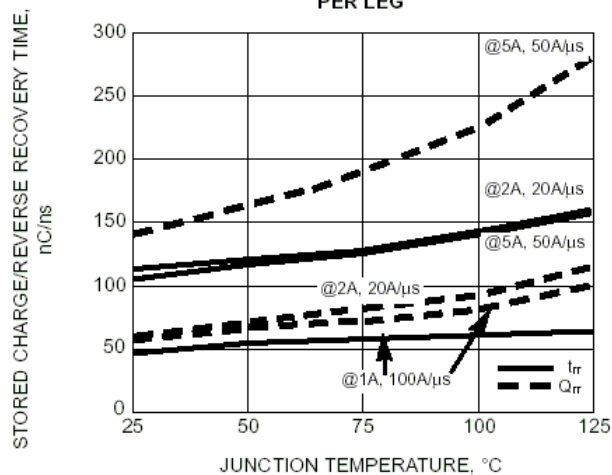


FIG. 6 - TYPICAL JUNCTION CAPACITANCE PER LEG

