

UESP08D

Ultra fast Plastic Power Rectifiers

VOLTAGE: 200V

CURRENT:8.0A

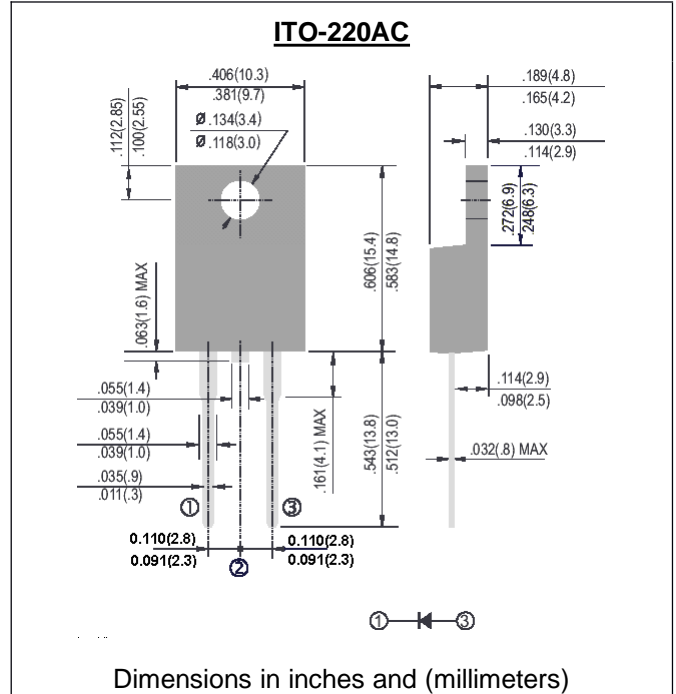


FEATURE

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
Glass passivated junction
Low switching losses, high efficiency
Low leakage current
High forward surge capability

MECHANICAL DATA

Case: JEDEC ITO-220AC 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: 10 in-lbs maximum



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	UESP08D	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	200	V
Maximum RMS Voltage	V _{rms}	140	V
Maximum DC blocking Voltage	V _{dc}	200	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}	125	A
Maximum Forward Voltage at rated Forward Current and 25°C	V _f	0.95	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 Ta =25°C at rated DC blocking voltage Ta =100°C	I _r	10 400	μA
Storage and Operating Temperature Range	T _{stg, Tj}	-55 to +150	°C

Note:

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

RATINGS AND CHARACTERISTIC CURVES UESP08D

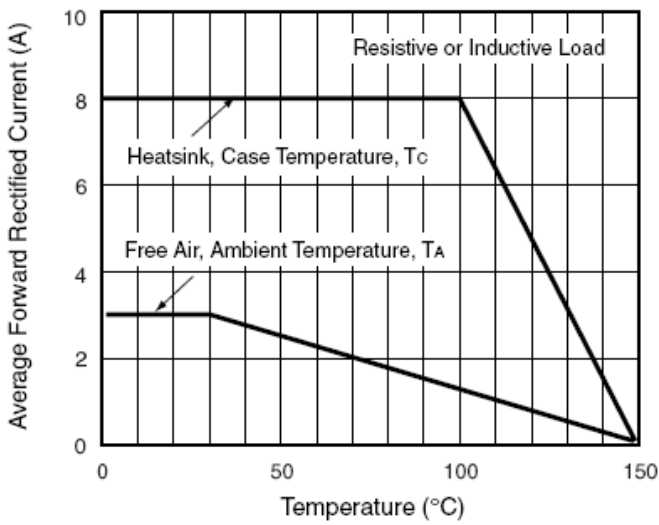


Figure 1. Maximum Forward Current Derating Curve

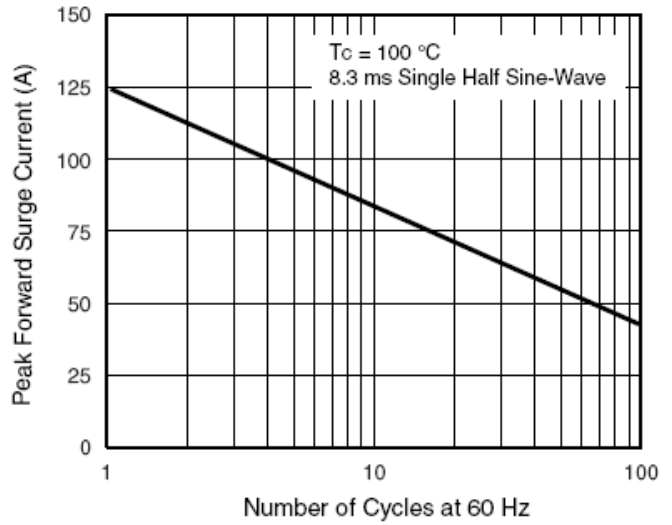


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

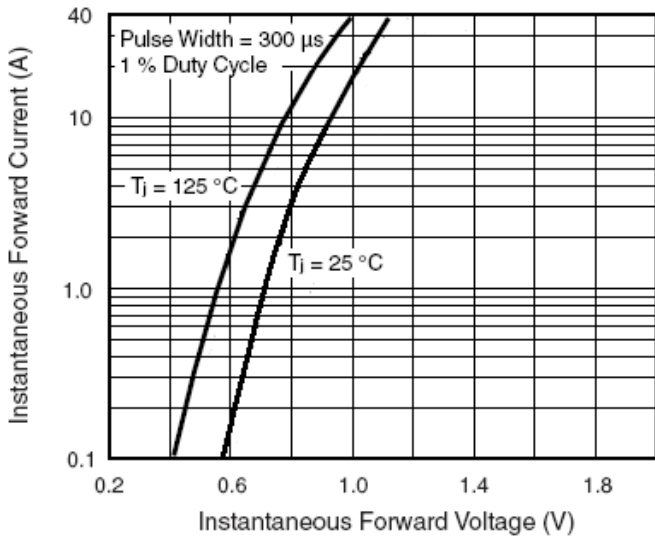


Figure 3. Typical Instantaneous Forward Characteristics

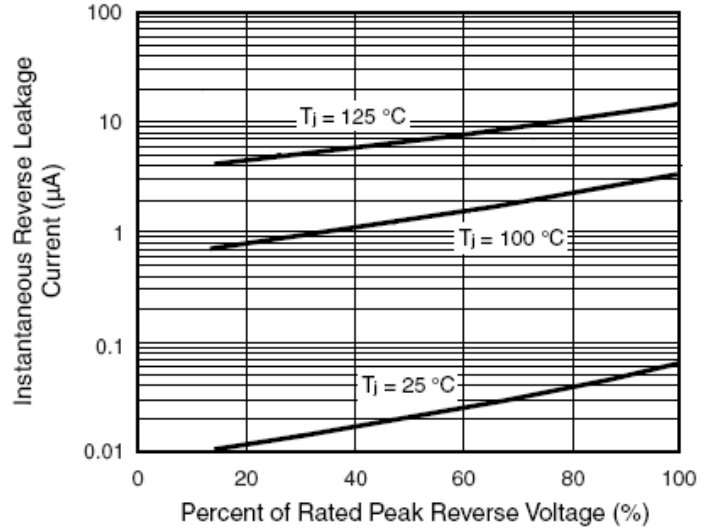


Figure 4. Typical Reverse Leakage Characteristics

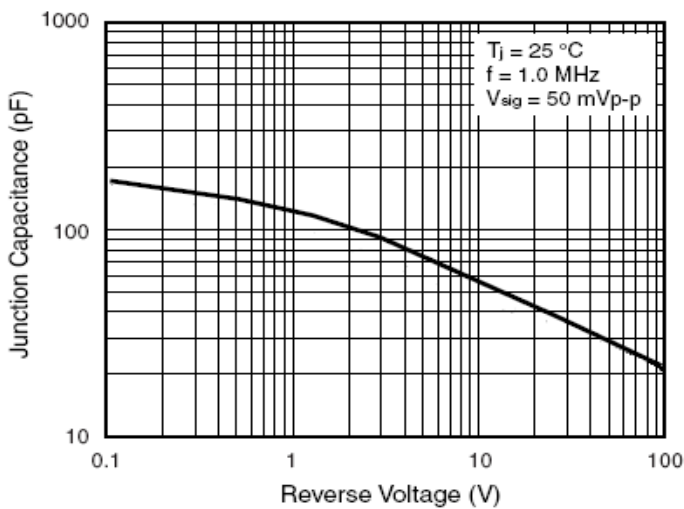


Figure 5. Typical Junction Capacitance