

UESA06J

Ultra fast Plastic Power Rectifiers

VOLTAGE: 600V

CURRENT: 6.0A

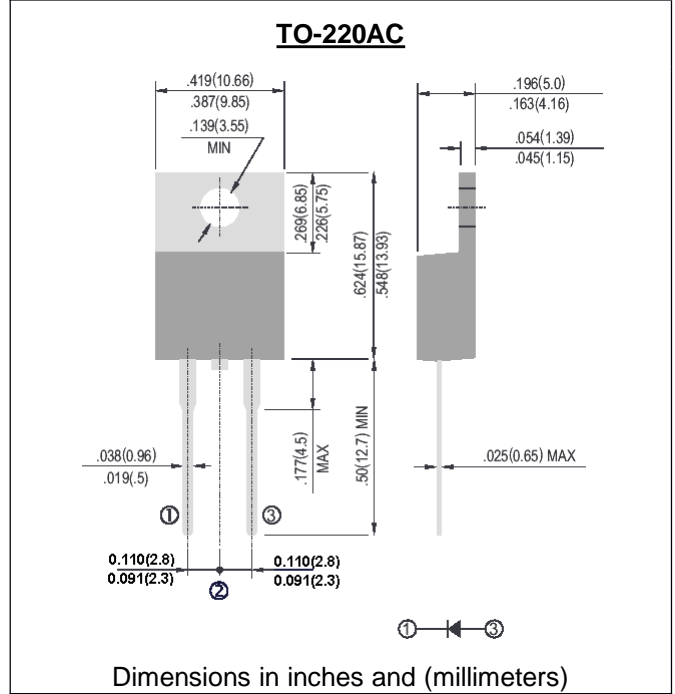


FEATURE

- 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

MECHANICAL DATA

Case: JEDEC TO-220AC molded plastic body over passivated chip
 Terminals: Plated Insert leads, solderable per MIL-STD-750, Method 2026
 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	UESA06J	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 rated Forward Current	V _f	1.6	V
Maximum Reverse Recovery Time (Note 1)	T _{rr}	35	nS
Typical thermal resistance junction to case	R _{th(jc)}	4.0	°C/W
Maximum DC Reverse Current Ta = 25°C	I _r	10	μA
at rated DC blocking voltage Ta = 125°C		100	
Storage and Operating Temperature Range	T _{stg} , T _j	-55 to +150	°C

Note:

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

RATINGS AND CHARACTERISTIC CURVES UESA06J

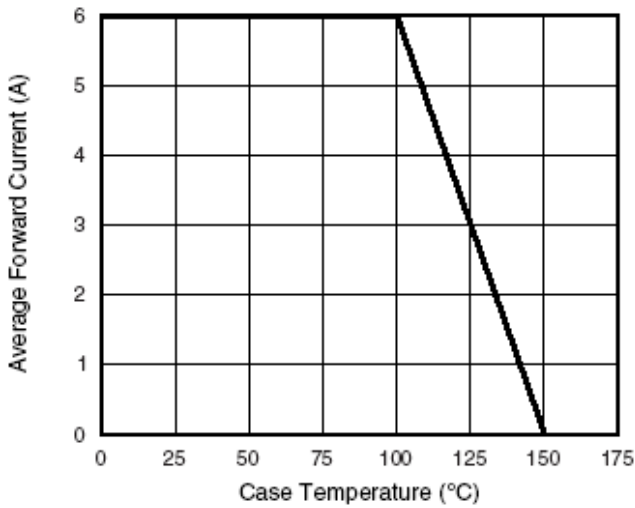


Figure 1. Forward Current Derating Curve

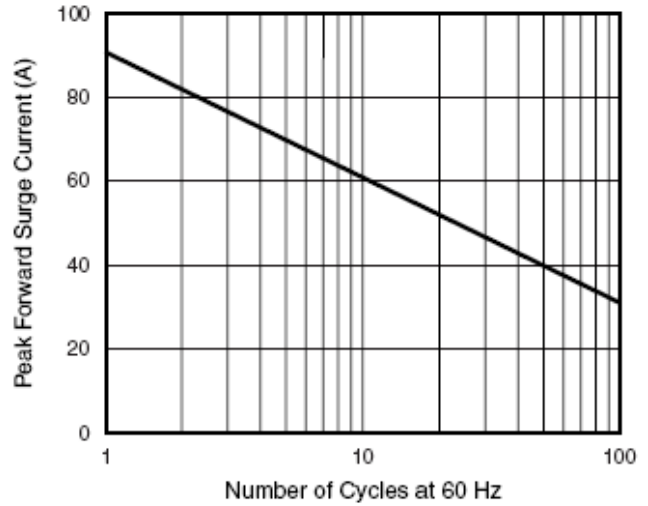


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

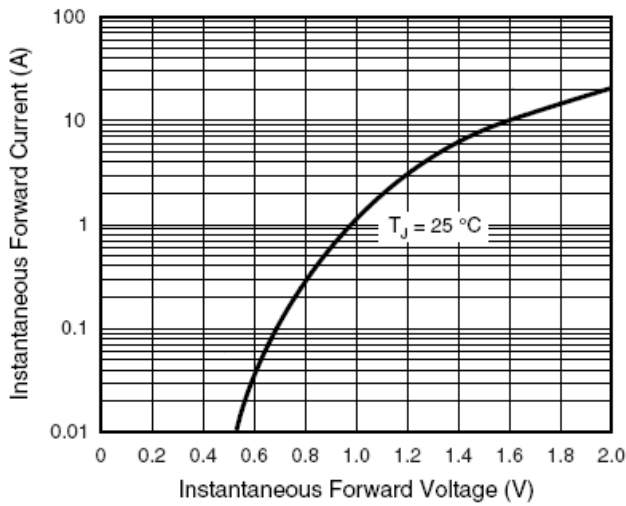


Figure 3. Typical Forward Voltage

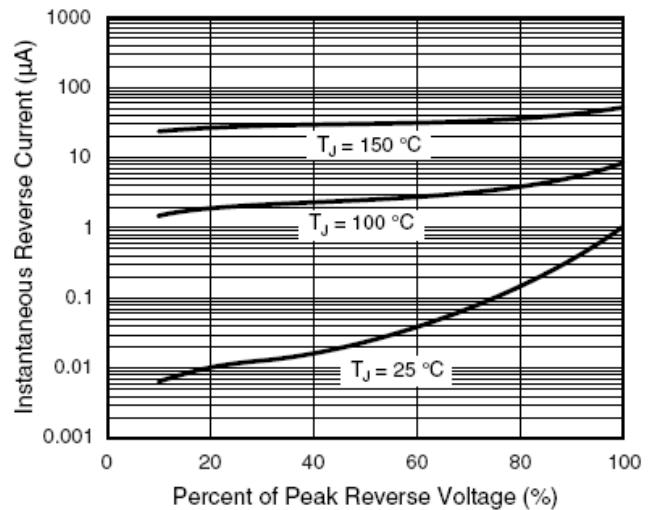


Figure 4. Typical Reverse Current

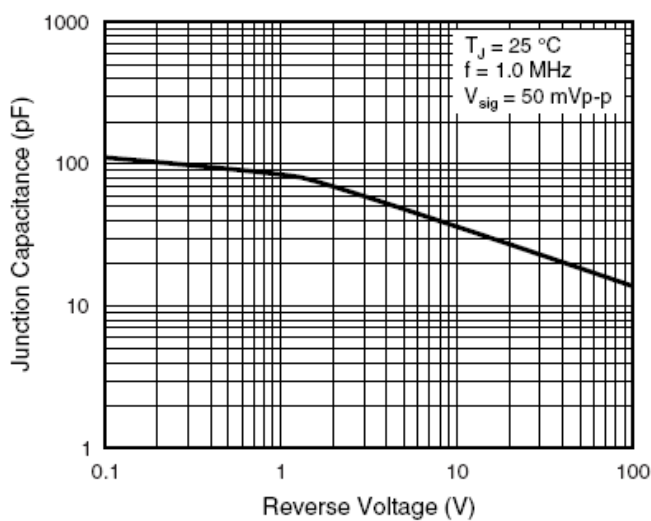


Figure 5. Typical Junction Capacitance