UESA06J

Ultra fast Plastic Power Rectifiers

VOLTAGE：600V **CURRENT：6.0A**

GULF SEMI

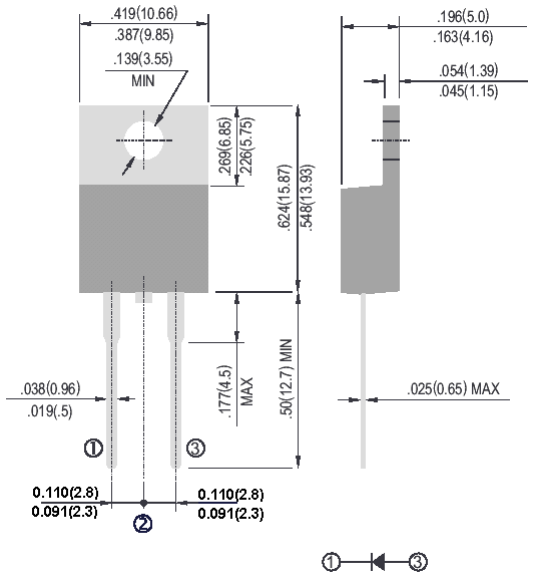
FEATURE

- 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

TO-220AC



Dimensions in inches and (millimeters)

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	Vrrm	600	V
Maximum RMS Voltage	Vrms	420	V
Maximum DC blocking Voltage	Vdc	600	V
Maximum Average Forward Rectified at Tc =100°C	If(av)	6.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	90	A
Maximum Forward Voltage at rated Forward Current	Vf	1.6	V
Maximum Reverse Recovery Time (Note 1)	Trr	35	nS
Typical thermal resistance junction to case	Rth(jc)	4.0	℃/W
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =125℃	Ir	10 100	μA
Storage and Operating Temperature Range	Tstg, Tj	-55 to +150	℃

Note:
Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A

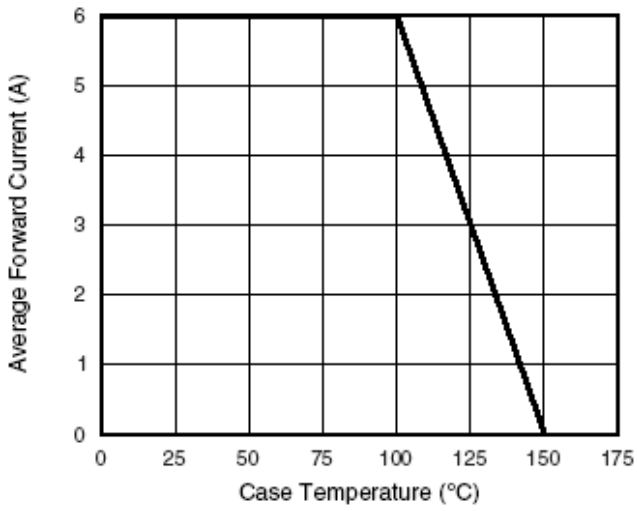


Figure 1. Forward Current Derating Curve

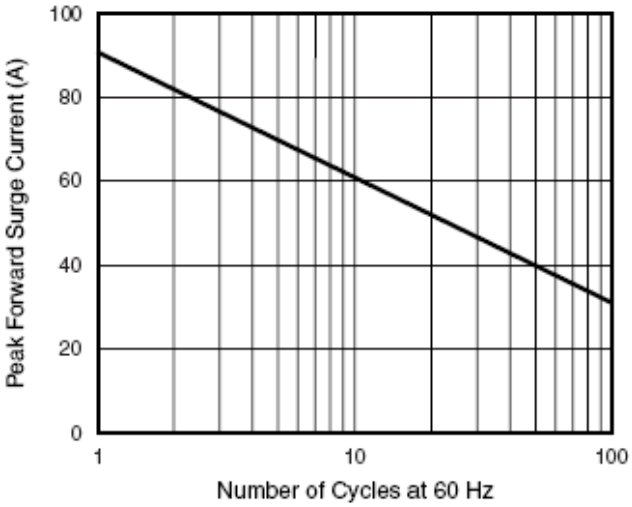


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

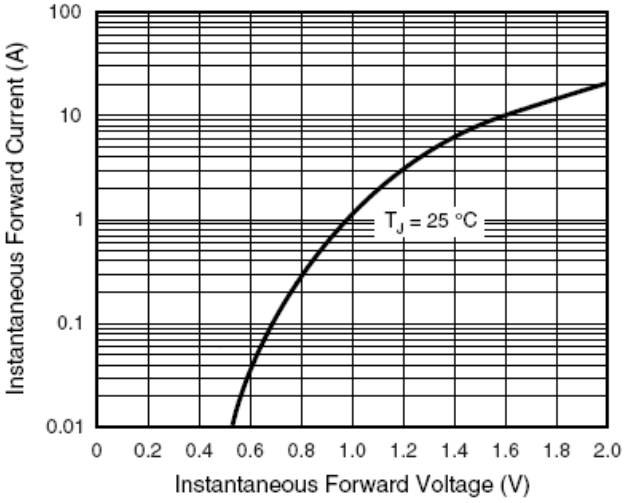


Figure 3. Typical Forward Voltage

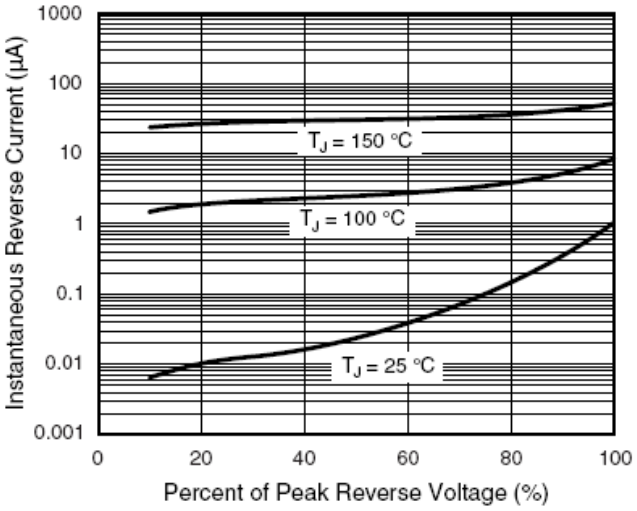


Figure 4. Typical Reverse Current

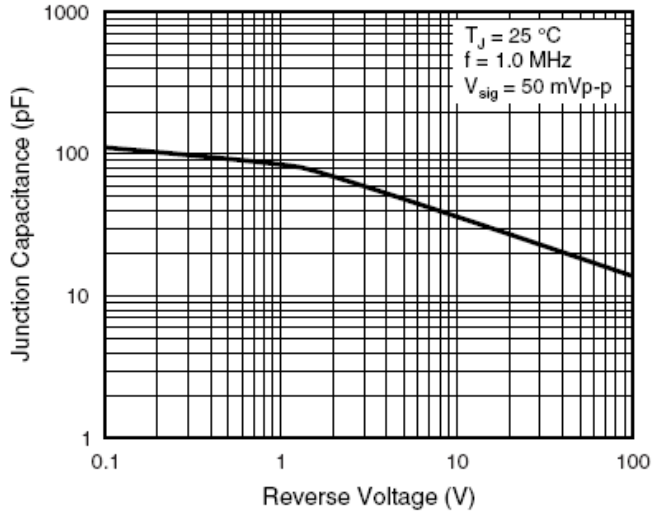


Figure 5. Typical Junction Capacitance