

UERA16A

Ultra fast Plastic Power Rectifiers

VOLTAGE: 50V

CURRENT: 16.0A



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

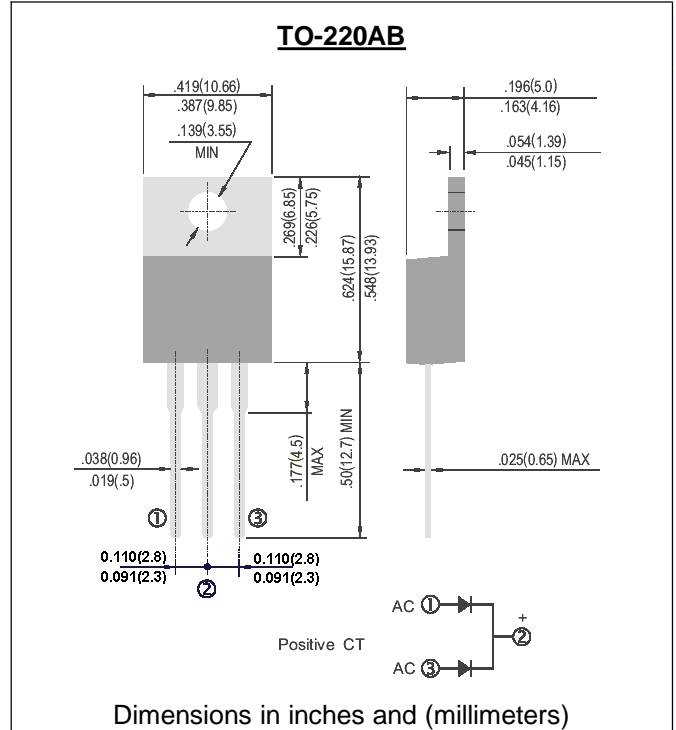
MECHANICAL DATA

Case: JEDEC 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



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	UERA16A	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	50	V
Maximum RMS Voltage	V _{rms}	35	V
Maximum DC blocking Voltage	V _{dc}	50	V
Maximum Average Forward Rectified at T _c =100°C	I _{f(av)}	16.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	200	A
Maximum Forward Voltage at 25°C at 8A	V _f	0.95	V
Maximum Reverse Recovery Time (Note 1)	T _{rr}	35	nS
Typical thermal resistance junction to case	R _{th(jc)}	2.2	°C/W
Typical junction capacitance per leg (Note 2)	C _j	85	pF
Maximum DC Reverse Current Ta =25°C	I _r	10	μA
at rated DC blocking voltage Ta =100°C		500	μA
Storage and Operating Temperature Range	T _{stg} , T _j	-55 to +150	°C

Note:

1. Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

Rev.A1

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RATINGS AND CHARACTERISTIC CURVES UERA16A

Fig. 1 – Forward Current Derating Curve

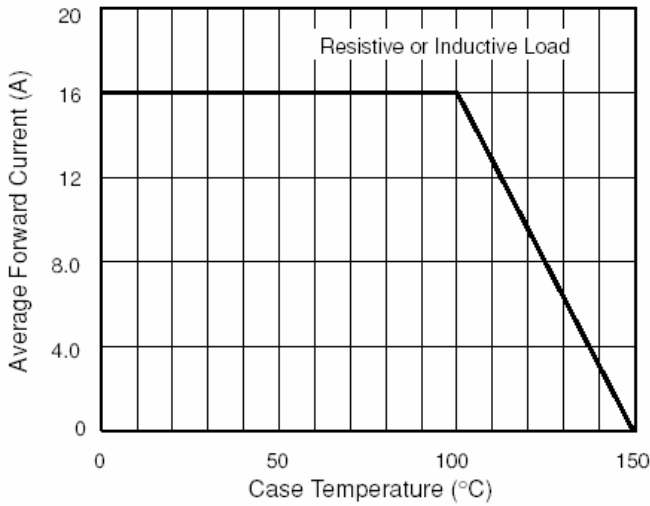


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

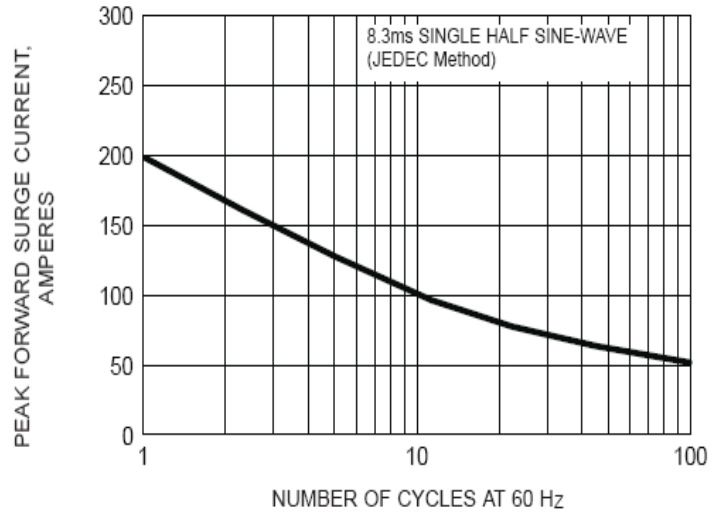


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

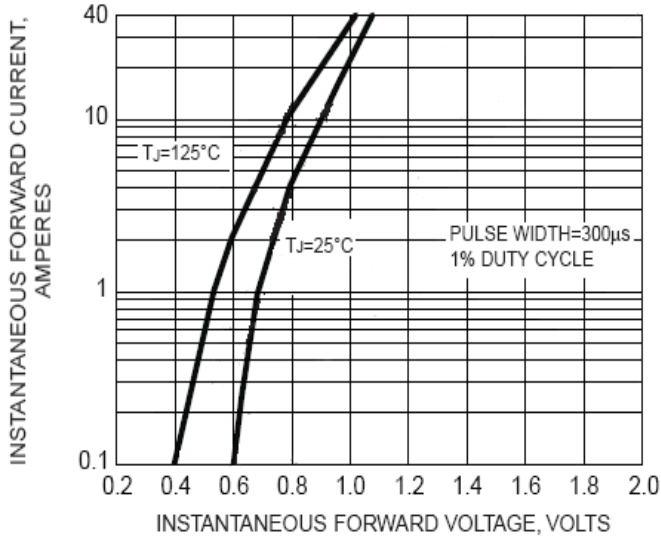


FIG. 4 -TYPICAL REVERSE CHARACTERISTICS PER LEG

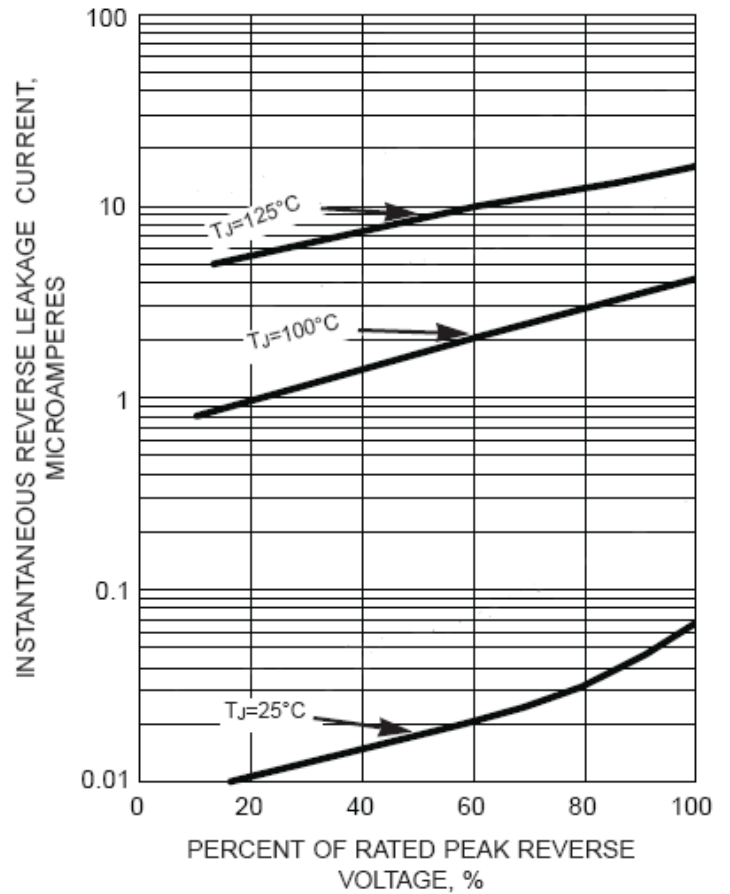


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

