

UERP16G

Ultra fast Plastic Power Rectifiers

VOLTAGE: 400V

CURRENT:16.0A

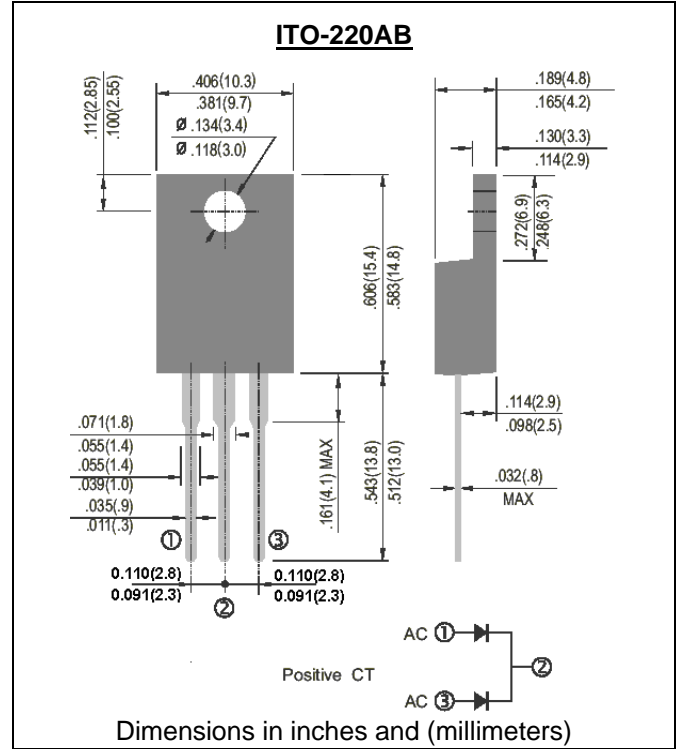


FEATURE

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
Glass passivated junction
Low power loss
Low forward voltage, high current capability
High surge current capability

MECHANICAL DATA

Case: JEDEC ITO-220AB molded plastic body
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	UERP16G	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	400	V
Maximum RMS Voltage	V _{rms}	280	V
Maximum DC blocking Voltage	V _{dc}	400	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}	120	A
Maximum Forward Voltage at Forward Current at 8A per leg	V _f	1.3	V
Maximum Reverse Recovery Time (Note1)	T _{rr}	35	nS
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I _r	1.0 250	μA
Typical thermal resistance junction to case	R _{th(jc)}	5.0	°C/W
Typical Junction Capacitance (Note2)	C _j	85	pF
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 1.0MHz and applied reverse voltage of 4.0Vdc

RATINGS AND CHARACTERISTIC CURVES UERP16G

FIG. 1 - FORWARD CURRENT DERATING CURVE

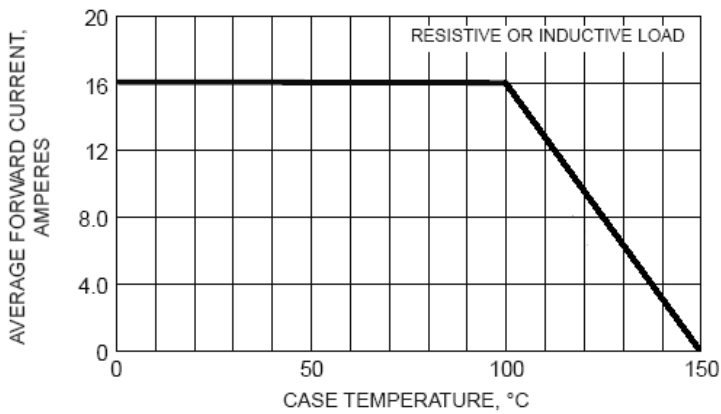


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

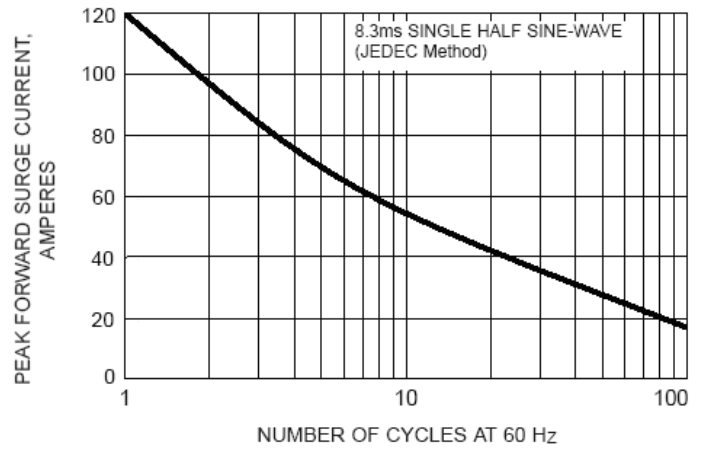


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

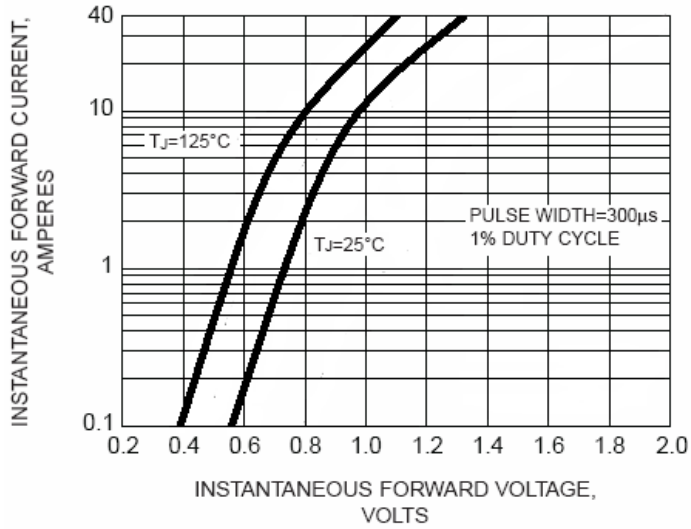


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

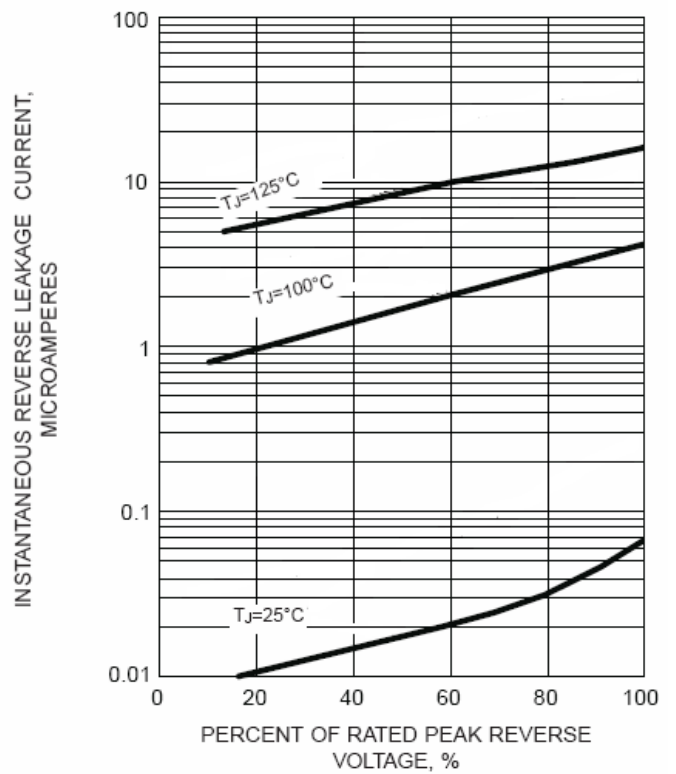


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

