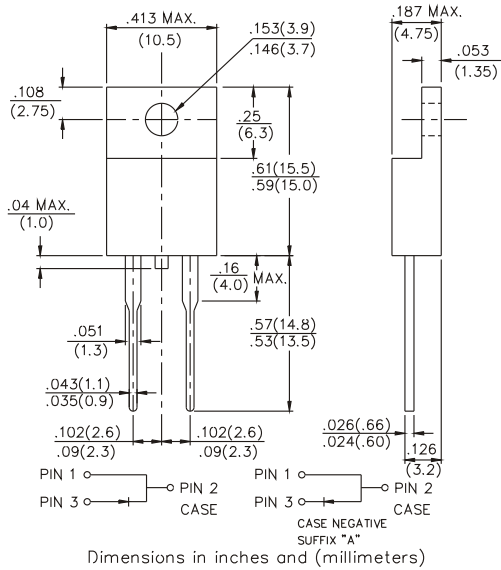
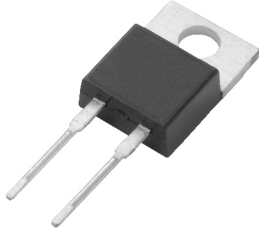


UF800 thru UF8010

SURFACE MOUNT REVERSE VOLTAGE 50 TO 1000VOLTS

ULTRA FAST RECTIFIERS FORWARD CURRENT - 8.0 AMPERES

TO-220AC



FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency
- Low forward voltage, high current capability
- High surge capacity
- Ultra Fast recovery times, high voltage
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

MECHANICAL DATA

- Case: TO-220AC molded plastic
- Terminals: Lead solderable per MIL-STD-202, Method 208
- Polarity: As marked
- Mounting Position: Any
- Weight: 0.08 ounce, 2.24 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS @T_A=25°C unless otherwise specified

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

	UF800	UF801	UF802	UF803	UF804	UF806	UF808	UF8010	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current at T _c =100°C	8.0								A
Peak Forward Surge Current, 8.3 ms single half sine -wave superimposed on rated load (JEDEC method)	125								A
Maximum Instantaneous Forward Voltage at 8.0 A per element	1.0		1.3		1.5	1.7			V
Maximum DC Reverse Current (Note 1) T _a =25°C at Rated DC Blocking Voltage T _a =125°C	10				500				µA
Typical Junction Capacitance (Note 1)	80				50				pF
Maximum Reverse Recovery Time (Note 2)	50				75				nS
Typical Thermal Resistance Note R _{θJC}	15								CW
Operating and Storage Temperature Range T _J	-55 to +150								C

NOTES:

1. Reverse Recovery Test Conditions: IF=0.5A, IR=1A, Irr=0.25A
2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC
3. Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted

UF800 thru UF8010

SURFACE MOUNT REVERSE VOLTAGE 50 TO 1000VOLTS

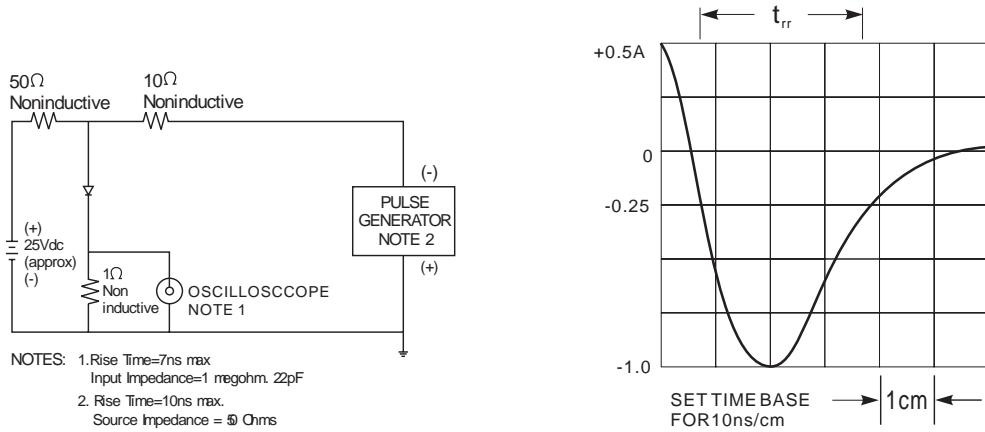


Fig.1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

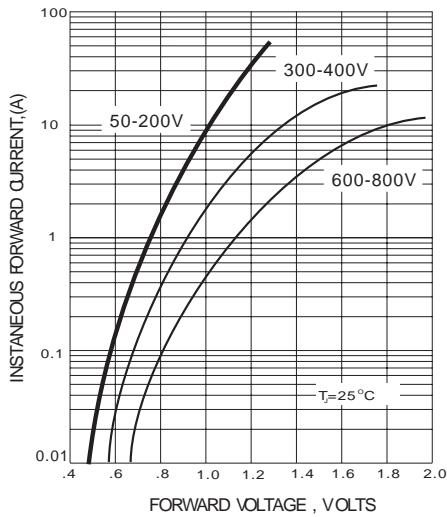


Fig. 2- FORWARD CHARACTERISTICS

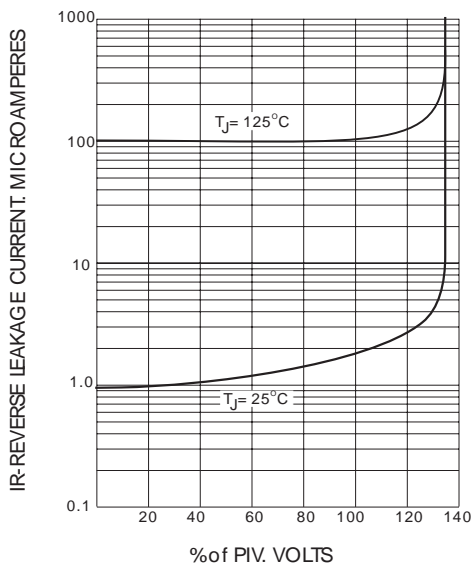


Fig.5- TYPICAL REVERSE CHARACTERISTICS

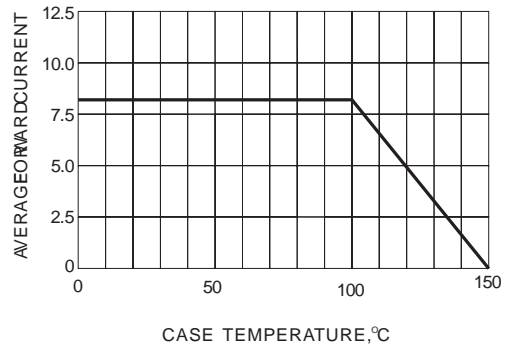


Fig.3- FORWARD CURRENT DERATING CURVE

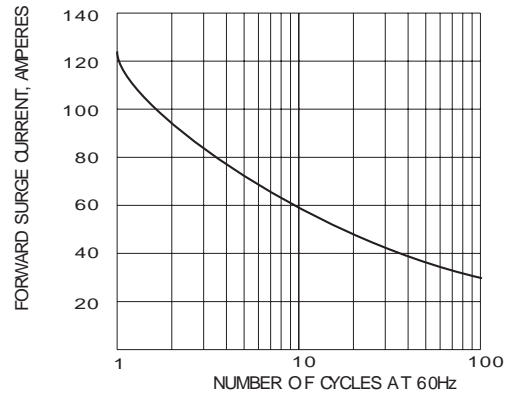


Fig.4- PEAK FORWARD SURGE CURRENT

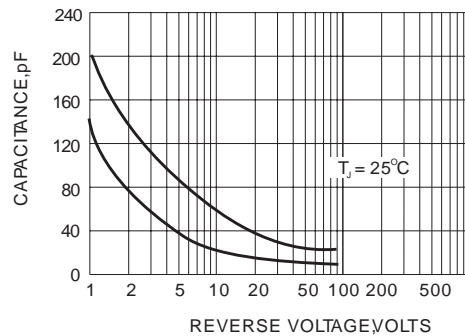


Fig.6- TYPICAL JUNCTION CAPACITANCE