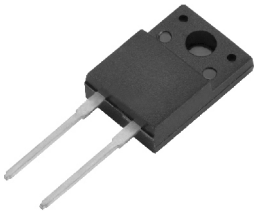
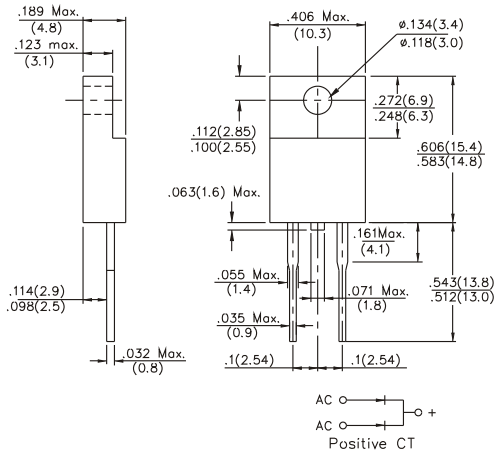
UF800F thru UF8010F

SURFACE MOUNT REVERSE VOLTAGE 50 TO 1000VOLTS

ULTRA FAST RECTIFIERS FORWARD CURRENT - 8.0 AMPERES



ITO-220AC



Dimensions in inches and (millimeters)

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:ITO-220AC full molded plastic package
- Terminals: Lead solderable per MIL-STD-202, Method 208
- Polarity: As marked
- Mounting Position: Any
- Weight: 0.08 ounce, 2.26 gram

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

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

	UF800F	UF801F	UF802F	UF803F	UF804F	UF806F	UF808F	UF8010F	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 Tc=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) Ta=25°C	10								μA
at Rated DC Blocking Voltage Ta=125°C	500								
Typical Junction Capacitance (Note 1)	80					50			pF
Maximum Reverse Recovery Time (Note 2)	50					75			nS
Typical Thermal Resistance Note $R_{\theta JC}$	15								℃/W
Operating and Storage Temperature Range T_J	-55 to +150								℃

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

SURFACE MOUNT REVERSE VOLTAGE 50 TO 1000VOLTS

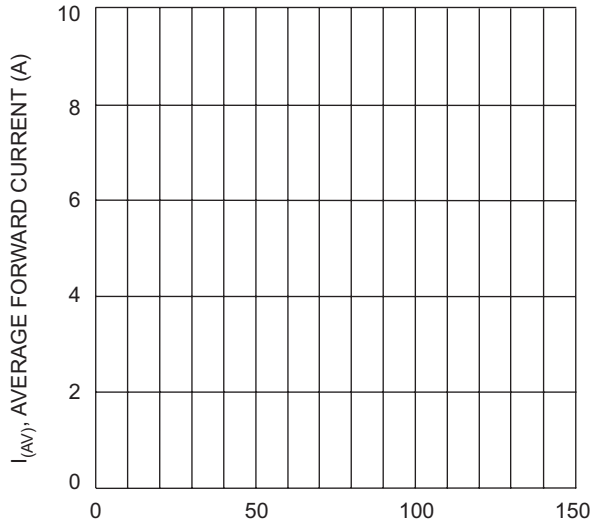


Fig. 1 Forward Current Derating Curve

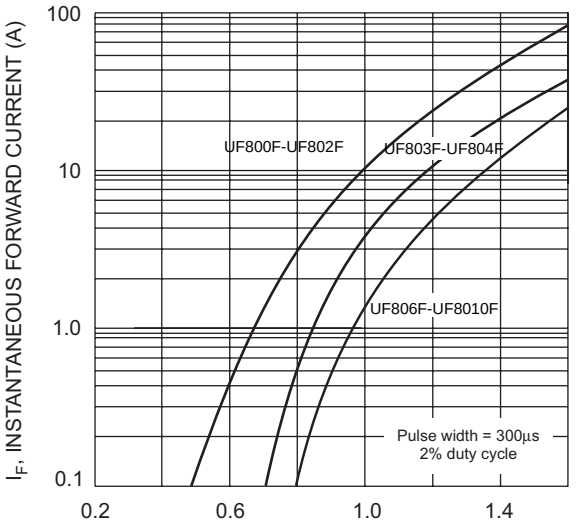


Fig. 2 Typical Forward Characteristics

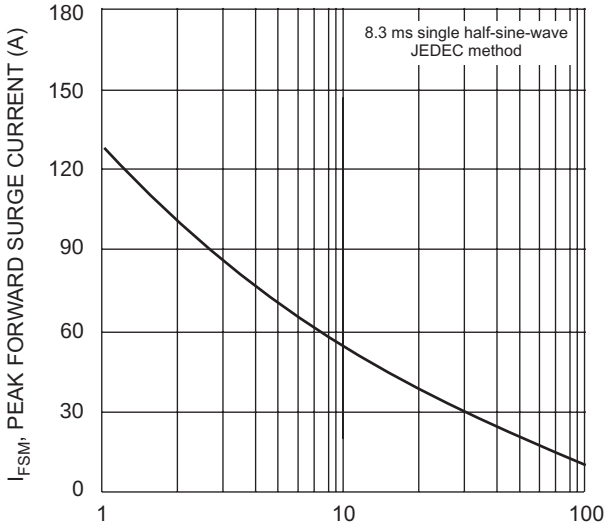


Fig. 3 Max Non-Repetitive Surge Current

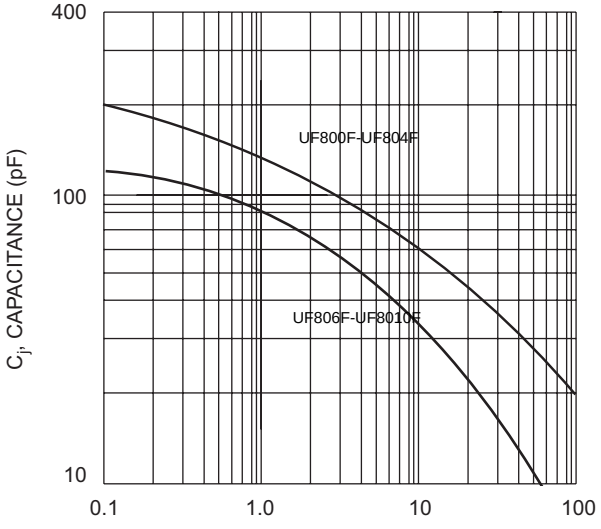


Fig. 4 Typical Junction Capacitance