

DATA SHEET

UF200 thru UF2010

ULTRAFAST SWITCHING RECTIFIER

VOLTAGE 50 to 1000 Volts **CURRENT** 2.0 Amperes

DO-15

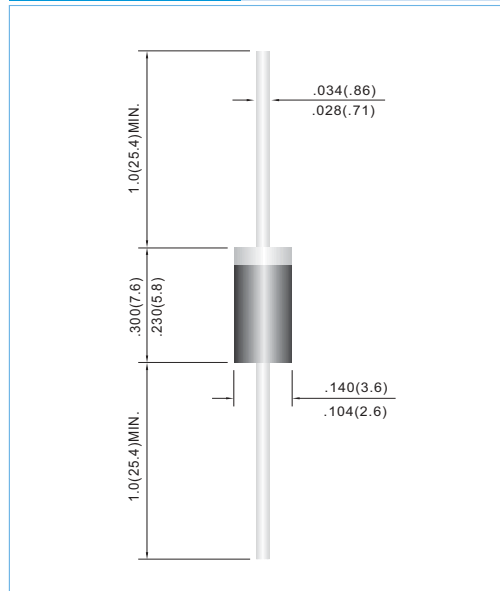
Unit: inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MIL-S-19500/228.
- Ultra Fast switching for high efficiency.
- Both normal and Pb free product are available :
Normal : 80~95% Sn, 5~20% Pb
Pb free: 98.5% Sn above

MECHANICAL DATA

Case: Molded plastic, DO-15
Terminals: Axial leads, solderable per MIL-STD-202, Method 208
Polarity: Band denotes cathode
Mounting Position: Any
Weight: 0.015 ounce, 0.4 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.

PARAMETER	SYMBOL	UF200	UF201	UF202	UF204	UF206	UF208	UF2010	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current at TA=55°C	I _{AV}	2.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	60							A
Maximum Forward Voltage at 2.0A	V _F	1.0			1.3	1.7			V
Maximum DC Reverse Current at TA=25°C Rated DC Blocking Voltage TA=100°C	I _R	10.0 100							uA
Typical Junction capacitance (Note 1)	C _J	35							pF
Typical Thermal Resistance(Note 2)	RθJA	40							°C / W
Maximum Reverse Recovery Time (Note 3)	T _{RR}	50				75			ns
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-55 TO +150							°C

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Thermal Resistance from Junction to Ambient and from Junction to lead length 0.375"(9.5mm) P.C.B. mounted.
3. Reverse Recovery Time I_F=.5A , I_R=1A , I_{rr}= .25A

RATING AND CHARACTERISTIC CURVES

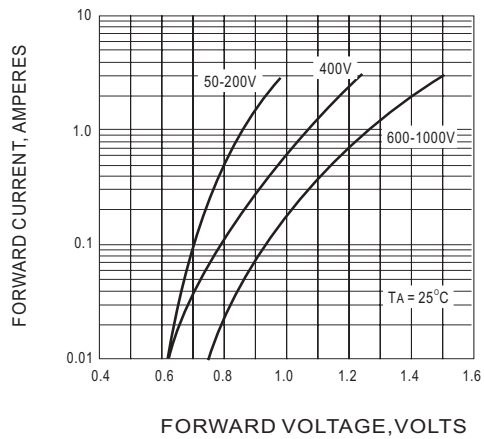


Fig.1 FORWARD CHARACTERISTICS

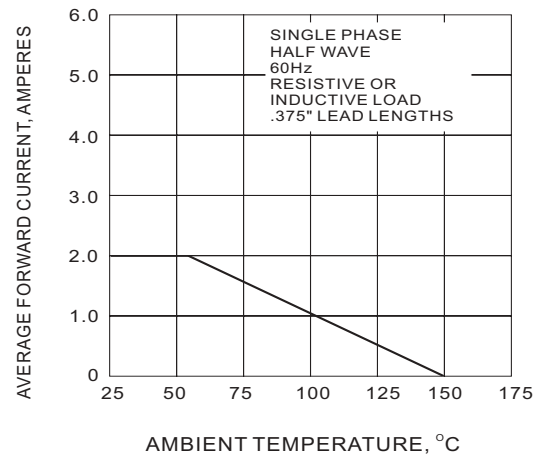


Fig.2 FORWARD CURRENT DERATING CURVE

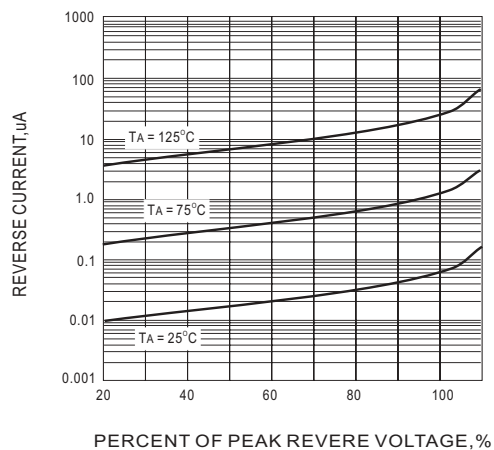


Fig.3 TYPICAL REVERSE LEAKAGE CHARACTERISTICS

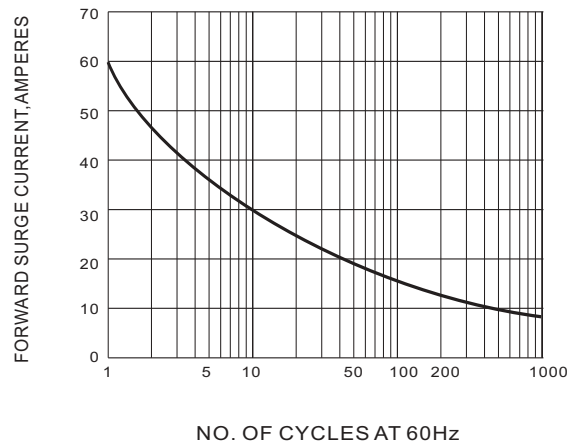


Fig.4 PEAK FORWARD SURGE CURRENT