PANJIT SEMI CONDUCTOR

DATA SHEET

UF200 thru UF2010

ULTRAFAST SWITCHING RECTIFIER

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

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

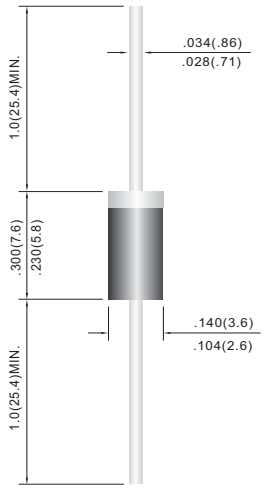
Terminals: Axial leads, solderable per MIL-STD-202,Method 208

Polarity: Band denotes cathode

Mounting Position: Any

Weight: 0.015 ounce, 0.4 gram

DO-15 Unit: inch(mm)



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

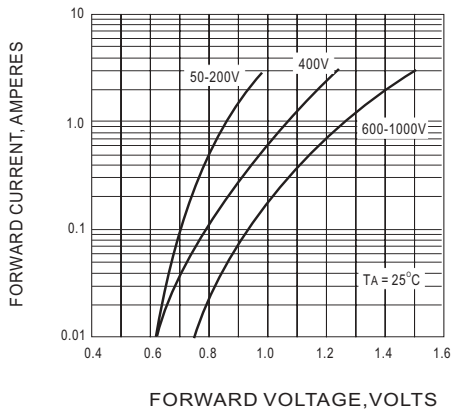


Fig.1 FORWARD CHARACTERISTICS

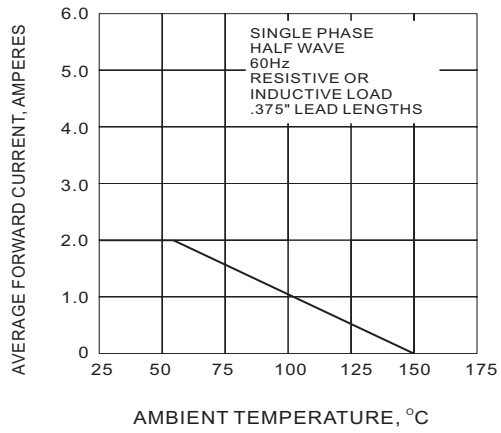


Fig.2 FORWARD CURRENT DERATING CURVE

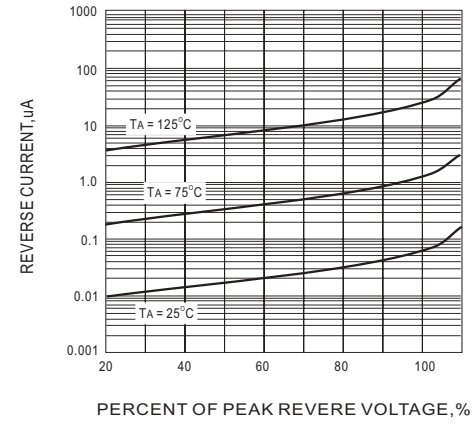


Fig.3 TYPICAL REVERSE LEAKAGE CHARACTERISTIC

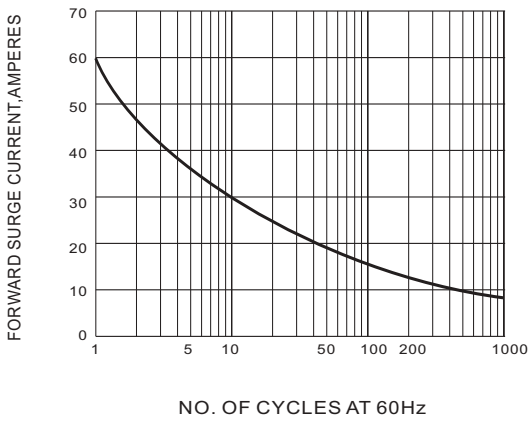


Fig.4 PEAK FORWARD SURGE CURREN