

DATA SHEET

UF300G thru UF308G

GLASS PASSIVATED JUNCTION ULTRAFAST SWITCHING RECTIFIERS

VOLTAGE 50 to 800 Volts **CURRENT** 3.0 Amperes

DO-201AD

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

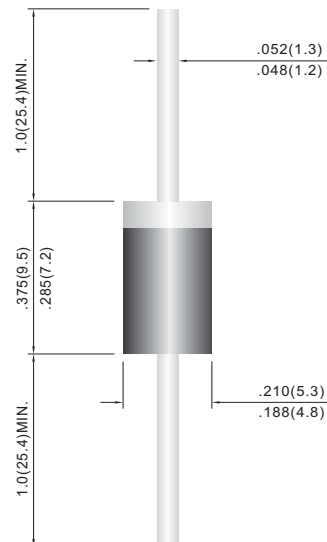
Case: Molded plastic, DO-201AD

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

Polarity: Band denotes cathode

Mounting Position: Any

Weight: 0.04 ounce, 1.1 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

PARAMETER	SYMBOL	UF300G	UF301G	UF302G	UF304G	UF306G	UF308G	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	V
Maximum Average Forward Current .375"(9.5mm) lead length at TA=55°C	I _{AV}	3.0						A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	150						A
Maximum Forward Voltage at 3.0A	V _F	1.0			1.3	1.7		V
Maximum DC Reverse Current TJ =25°C at Rated DC Blocking Voltage TJ =100°C	I _R	10.0 300						uA
Typical Junction capacitance (Note 1)	C _J	75			50			pF
Typical Thermal Resistance (Note 2)	RθJA	60						°C /W
Maximum Reverse Recovery Time (Note 3)	T _{RR}	50				100		ns
Operating Junction and Storage Temperature Range	TJ,TSTG	-55 TO +150						°C

NOTES:

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

RATING AND CHARACTERISTIC CURVES

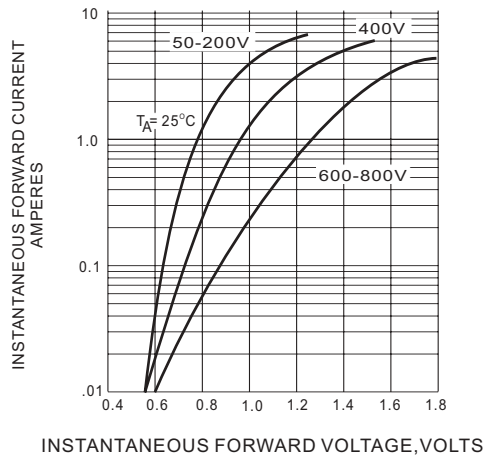


Fig.1 FORWARD CHARACTERISTICS

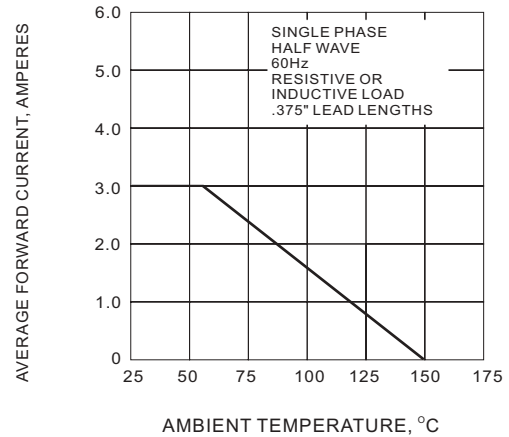


Fig.2 FORWARD CURRENT DERATING CURVE

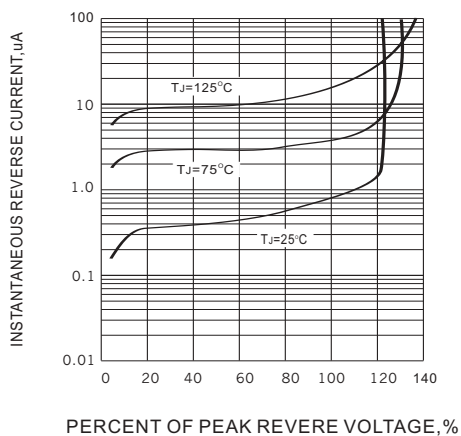


Fig.3 TYPICAL REVERSE LEAKAGE CHARACTERISTICS

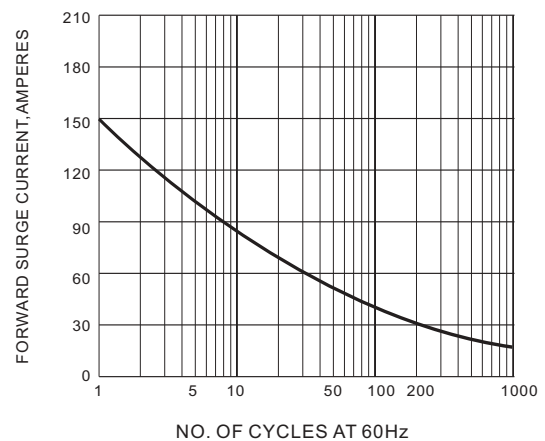


Fig.4 PEAK FORWARD SURGE CURRENT