



# DATA SHEET

## UF100GS thru UF1010GS

### GLASS PASSIVATED JUNCTION ULTRAFAST RECOVERY RECTIFIER

**VOLTAGE** 50 to 1000 Volts **CURRENT** 1.0 Amperes

A-405

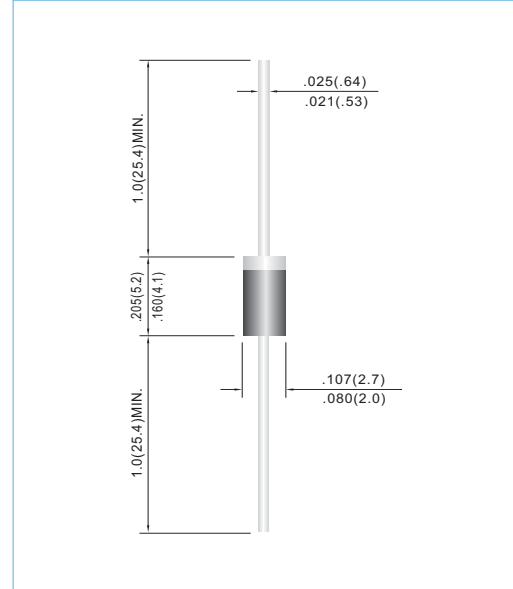
Unit: inch(mm)

#### 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 recovery for high efficiency.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

#### MECHANICAL DATA

Case: Molded plastic, A-405  
 Terminals: Axial leads, solderable per MIL-STD-202G, Method 208  
 Polarity: Band denotes cathode  
 Mounting Position: Any  
 Weight: 0.012 ounce, 0.336gram



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

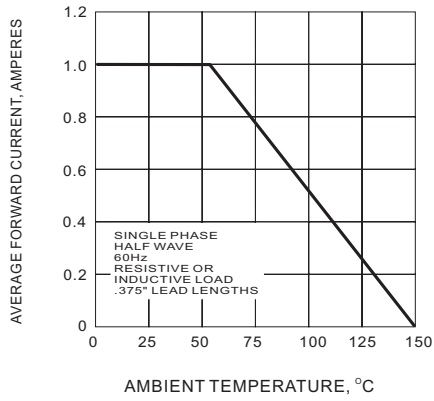
PARAMETER	SYMBOL	UF100GS	UF101GS	UF102GS	UF104GS	UF106GS	UF108GS	UF1010GS	UNITS	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V	
Maximum Average Forward Current .375"(9.5mm) lead length at T <sub>A</sub> =55°C	I <sub>AV</sub>	1.0							A	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I <sub>FSM</sub>	30							A	
Maximum Forward Voltage at 1.0A	V <sub>F</sub>	1.0		1.3		1.7			V	
Maximum DC Reverse Current T <sub>J</sub> =25°C at Rated DC Blocking Voltage T <sub>J</sub> =125°C	I <sub>R</sub>	10				150				μA
Typical Junction capacitance (Note 1)	C <sub>J</sub>	17							pF	
Typical Thermal Resistance(Note 2)	R <sub>θJA</sub>	60							°C / W	
Maximum Reverse Recovery Time (Note 3)	t <sub>rr</sub>	50				100				ns
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-50 TO +150							°C	

#### NOTES:

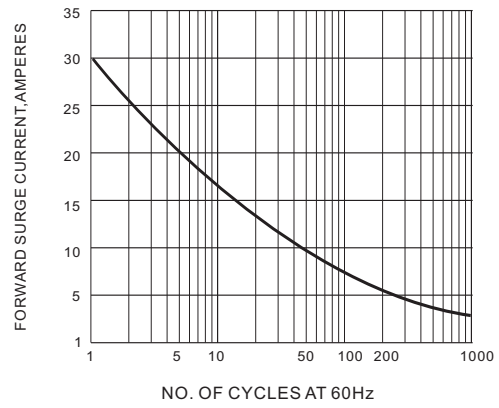
1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Thermal Resistance from Junction to Ambient and from Junction to lead length 0.375"(9.5mm) P.C.B. mounted.



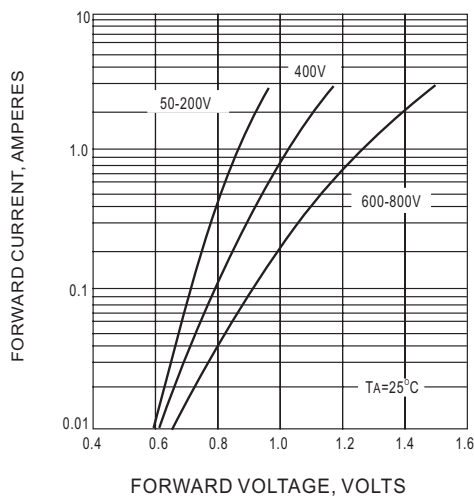
**RATING AND CHARACTERISTIC CURVES**



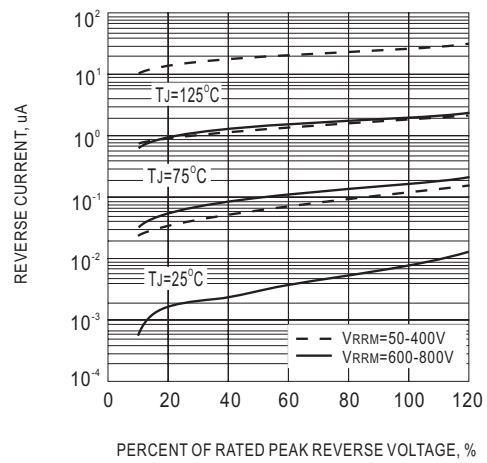
**Fig.1 FORWARD CURRENT DERATING CURVE**



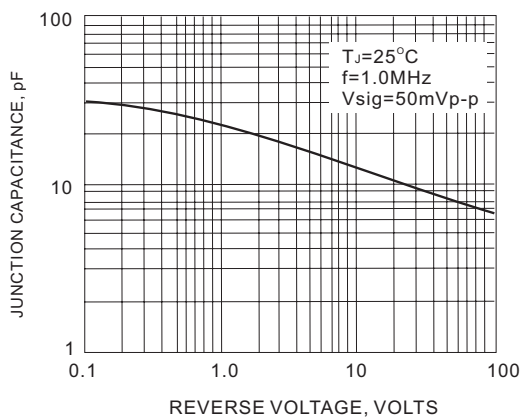
**Fig.2 PEAK FORWARD SURGE CURRENT**



**Fig.3 FORWARD CHARACTERISTICS**



**Fig.4 TYPICAL REVERSE CHARACTERISTICS**



**Fig.5 TYPICAL JUNCTION CAPACITANCE**