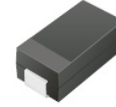




**1.0A SMD Sintered Glass Passivated Junction  
 Super Fast Recovery Rectifiers - 50V to 600V**



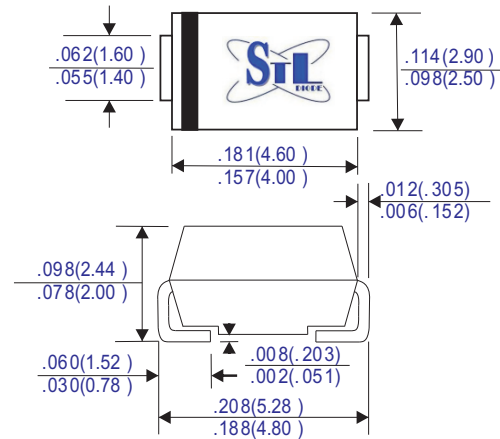
**FEATURES**

- High temperature metallurgically bonded construction
- Sintered glass cavity free junction
- Ideal for surface mount automotive applications
- For use in high frequency rectifier circuits
- Super fast switching for high efficiency
- High temperature soldering 450°C/5 sec at terminals
- Lead-free parts for green partner, meet environmental standards of MIL-S-19500

**MECHANICAL DATA**

- Case: Molded plastic SMA/DO-214AC
- Epoxy: UL94-V0 rated flame retardant
- Terminals: Solderable per MIL-STD-750 Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.002 ounces, 0.064 grams

**SMA (DO-214AC)**



Unit :inch(mm)

**MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS**

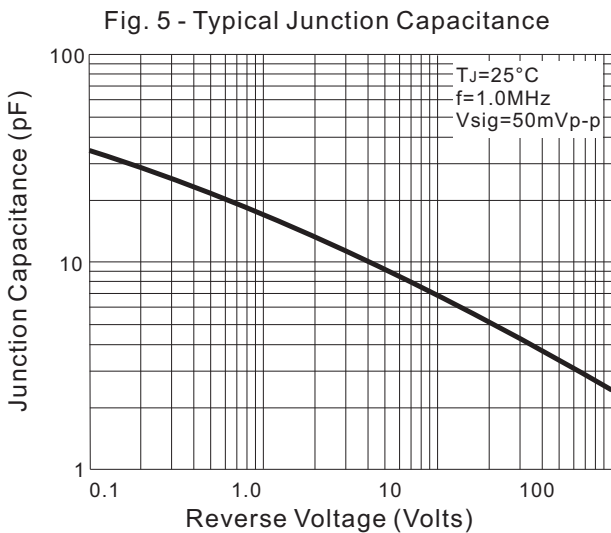
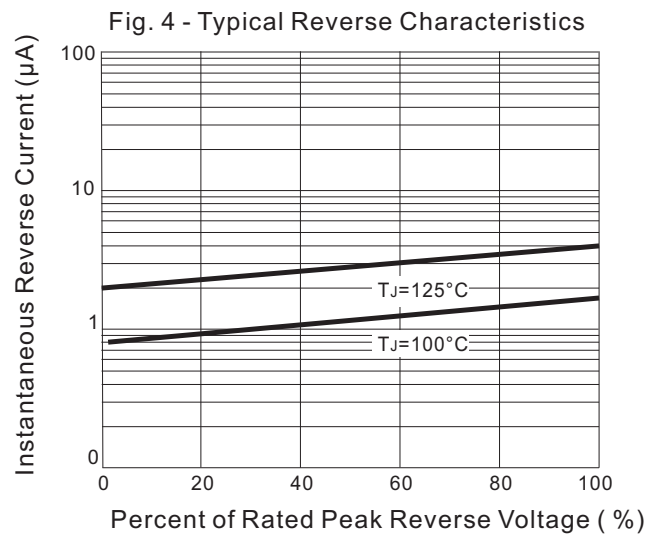
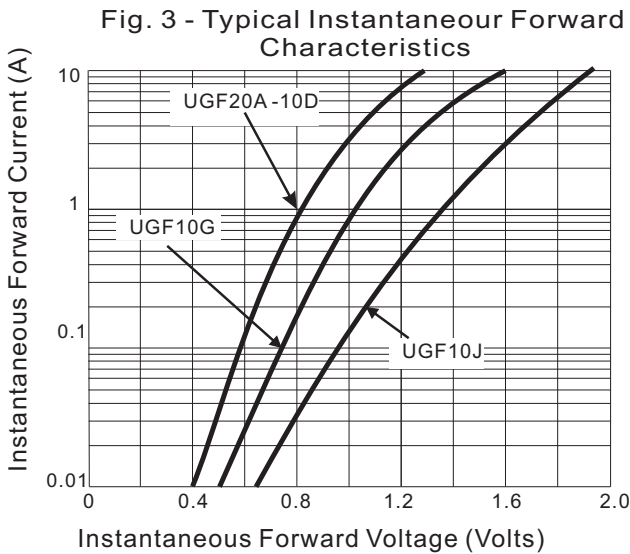
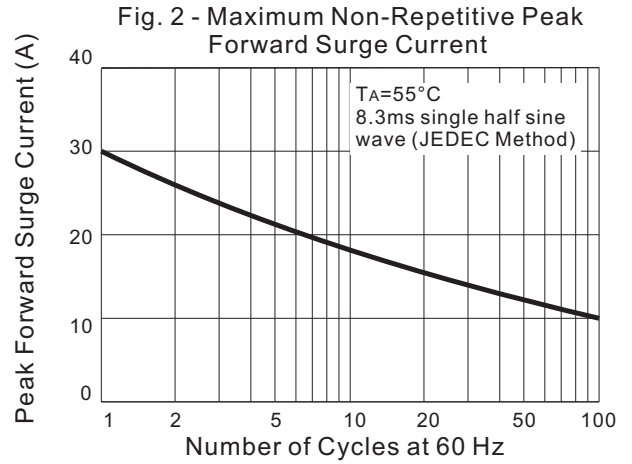
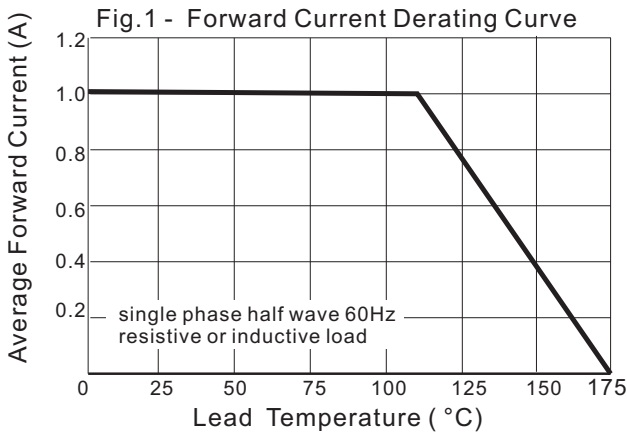
Ratings at 25°C ambient temperature unless otherwise specified

	Symbols	UGF 10A	UGF 10B	UGF 10D	UGF 10G	UGF 10J	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length at TL=110°C, See Figure 1	IF(AV)	1.0					A
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30.0					A
Maximum Instantaneous Forward Voltage at 1.0A	VF	0.95		1.3	1.5	Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	5.0 100.0					µA
Typical Reverse Recovery Time (Note 1)	Trr	35			50	nS	
Typical Junction Capacitance (Note 2)	CJ	10					pF
Typical Thermal Resistance (Note 3)	RθJA	34					°C/W
Operating Junction Temperature Range	TJ	-65~+175					°C
Storage Temperature Range	TSTG	-65 ~ +175					°C

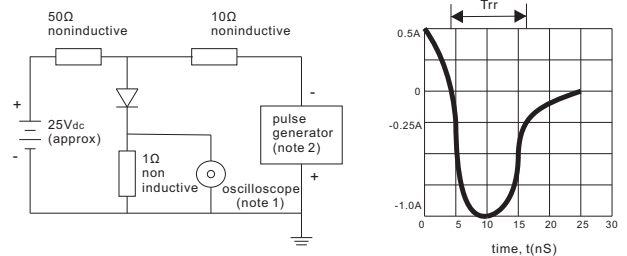
Note 1. Reverse recovery time test conditions: IF=0.5A, IR=1.0A, IRR=0.25A  
 2. Measure at 1.0MHz and applied reverse voltage of 4.0Volts.  
 3. Thermal resistance from junction to 0.375" (9.5mm) lead length P.C.B. mounted



Rating and Characteristic Curves  
**UGF10A thru UGF10J**



**Fig. 6 - Test Circuit Diagram and Reverse Recovery Time Characteristic**



Note: 1. rise time=7nS Max. input impedance=1MΩ, 22pF  
 2. rise time=10nS Max. source impedance=80Ω