



**1.0A SMD Sintered Glass Passivated Junction  
 Ultra Fast Recovery Rectifiers - 50V to 1000V**



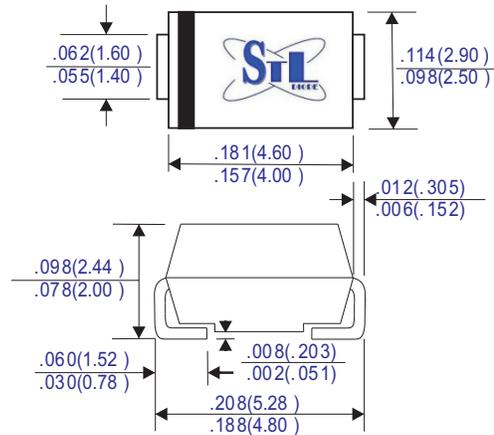
**FEATURES**

- High temperature metallurgically bonded construction
- Sintered glass cavity free junction
- Ideal for surface mount automotive applications
- For use in high frequency rectifier circuits
- 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**

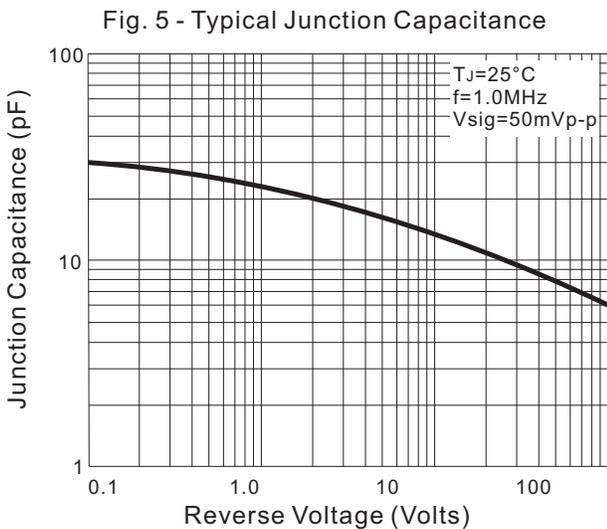
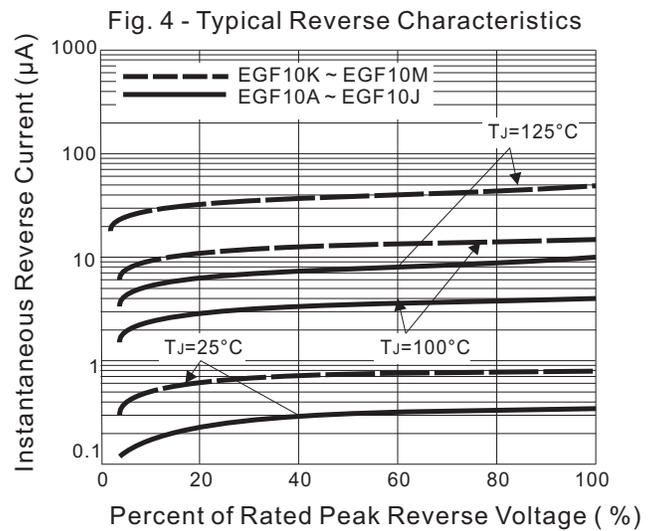
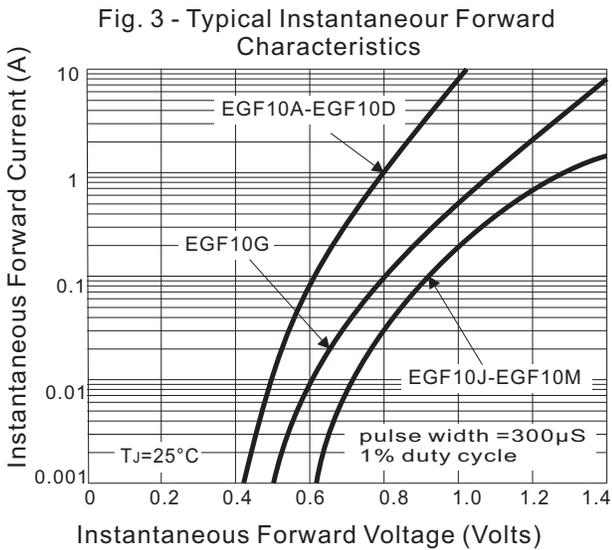
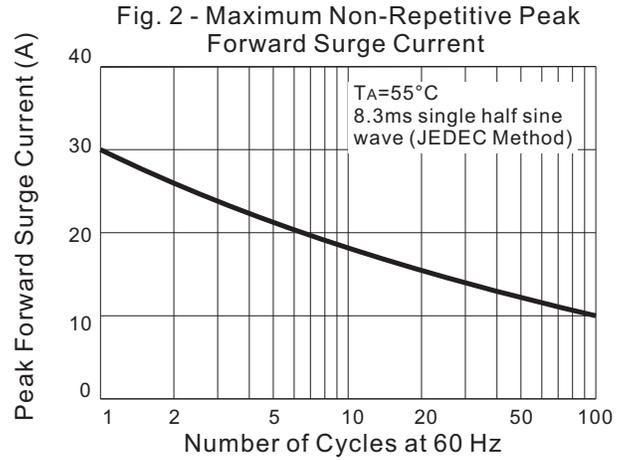
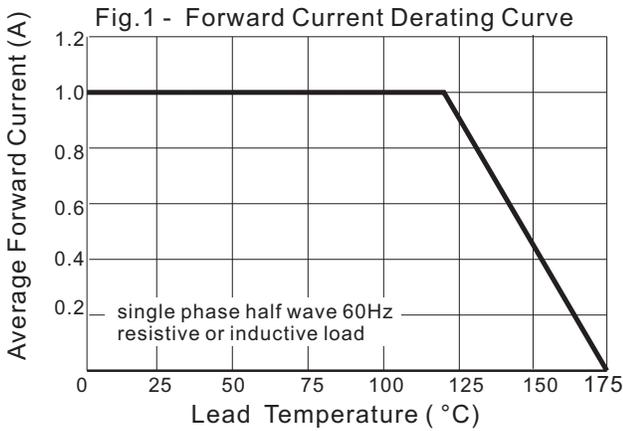
Ratings at 25°C ambient temperature unless otherwise specified

	Symbols	EGF 10A	EGF 10B	EGF 10D	EGF 10G	EGF 10J	EGF 10K	EGF 10M	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current TL=120°C	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	1.0		1.3		1.7		Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	5.0		50.0					µA
Maximum Reverse Recovery Time (Note 1)	Trr	50			75				nS
Typical Junction Capacitance (Note 2)	CJ	15							pF
Typical Thermal Resistance (Note 3)	RθJA RθJL	85,0			30,0				°C/W
Operating Junction & Storage Temperature Range	TJ, TSTG	-65 ~ +175							°C

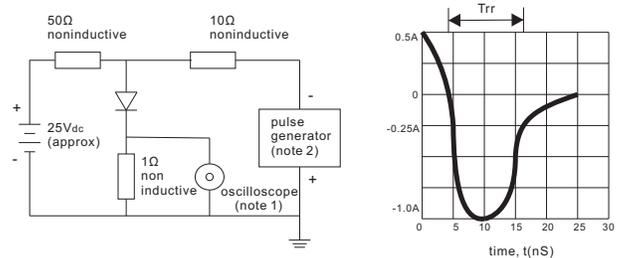
Note 1. Reverse recovery time test conditions: IF=0.5A, IR=1.0A, IRR=0.25A

2. Measure at 1.0MHz and applied reverse voltage of 4.0Volts.

3. Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2x0.2" (5.0x5.0mm) copper pad areas.



**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