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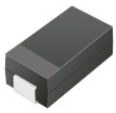
EGF20A thru EGF20M

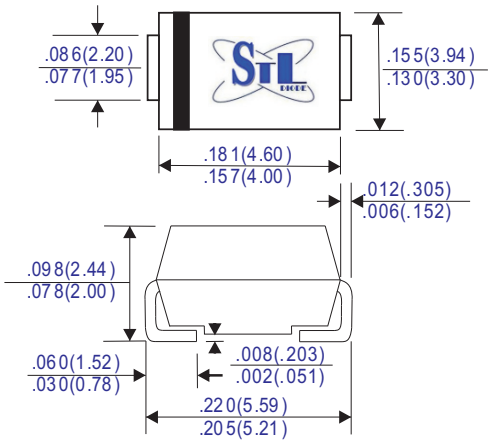
2.0A SMD Sintered Glass Passivated Junction Ultra Fast Recovery Rectifiers - *50V to 1000V*



FEATURES

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

SMB (DO-214AA)



Unit :inch(mm)

MECHANICAL DATA

- Case: Molded plastic SMB/DO-214AA
- Epoxy: UL94-V0 rated flame retardant
- Terminals: Solderable per MIL-STD-750 Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.003 ounces, 0.093 grams

MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

	Symbols	EGF 20A	EGF 20B	EGF 20D	EGF 20G	EGF 20J	EGF 20K	EGF 20M	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current T_L=120°C	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	60.0							A
Maximum Instantaneous Forward Voltage at 2.0A	V_F	1.0			1.3	1.7			Volts
Maximum DC Reverse Current T_A= 25°C at Rated DC Blocking Voltage T_A=125°C	I_R	5.0 50.0							μA
Maximum Reverse Recovery Time (Note 1)	Trr	50				75			nS
Typical Junction Capacitance (Note 2)	C_J	35							pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JL}$	75,0 20,0							°C/W
Operating Junction & Storage Temperature Range	T_J, T_{STG}	-65 ~ +175							°C

Note 1. Reverse reocery time test conditions: I_F-0.5A, I_R=1.0A, I_{RR}=0.25A
2. Measure at 1.0MHz and applied reverse voltage of 4.0Volts.
3. Thermal resistance from function to ambient and from junction to lead P.C.B. mounted on 0.2x0.2" (5.0x5.0mm) copper pad areas.

Fig.1 - Forward Current Derating Curve

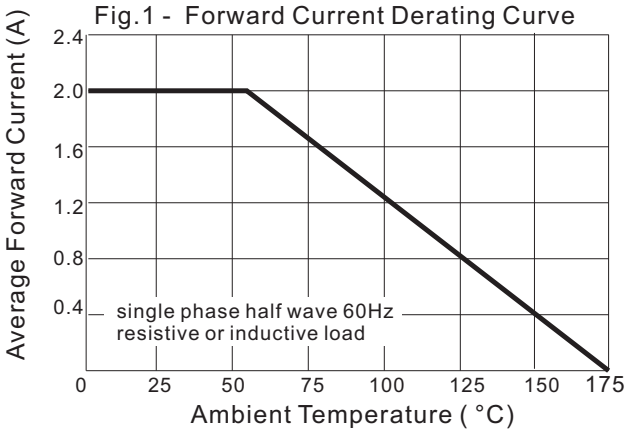


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

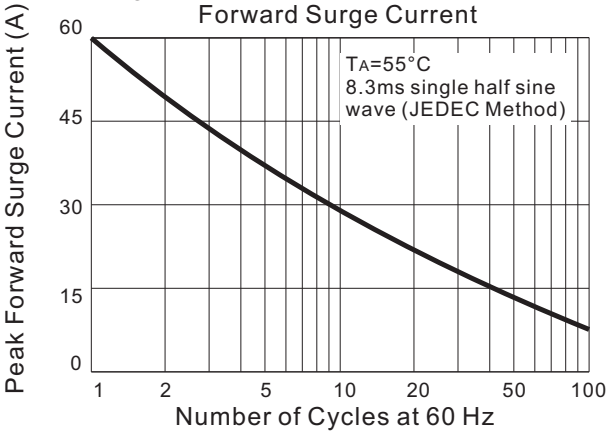


Fig. 3 - Typical Instantaneour Forward Characteristics

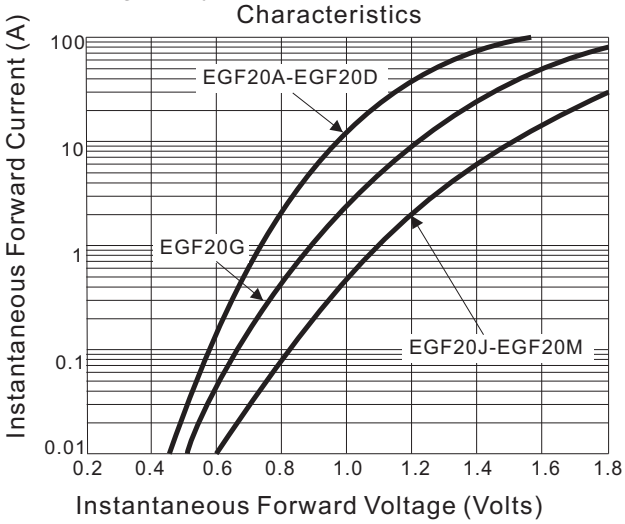


Fig. 4 - Typical Reverse Characteristics

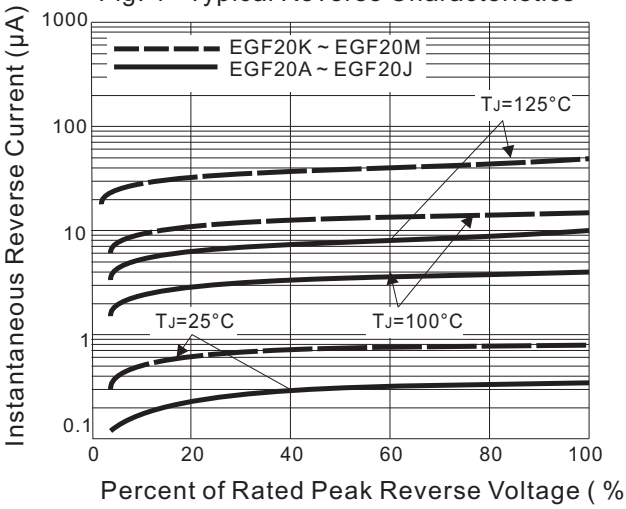


Fig. 5 - Typical Junction Capacitance

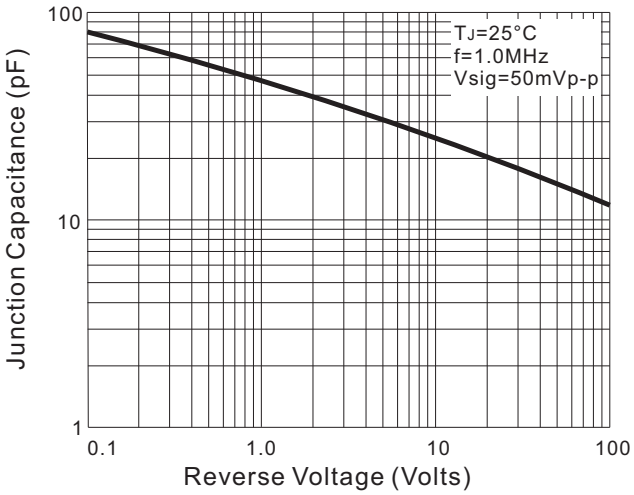
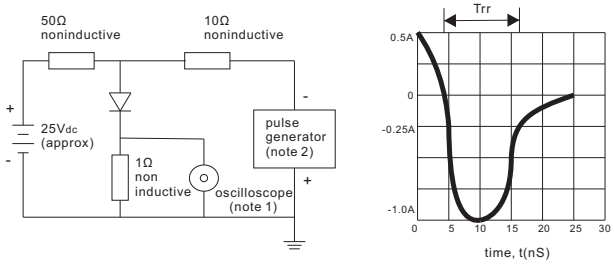


Fig. 6 - Test Circuit Diagram and Reverse Recovery Time Characteristic



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