

**VOLTAGE RANGE: 50 - 200V**

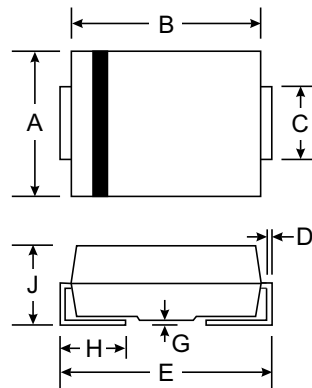
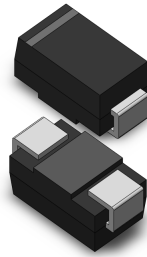
**CURRENT: 1.0 A**

### Features

- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-0
- Ideal for surface mount automotive applications
- High temperature metallurgically bonded construction
- Superfast recovery times for high efficiency
- Glass passivated cavity-free junction
- Built-in strain relief
- Easy pick and place

### Mechanical Data

- Case: SMA(DO-214AC)Molded Plastic
- Terminals: Solder Plated Terminal - Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)
- Mounting Position: Any



SMA(DO-214AC)		
Dim	Min	Max
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		



### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

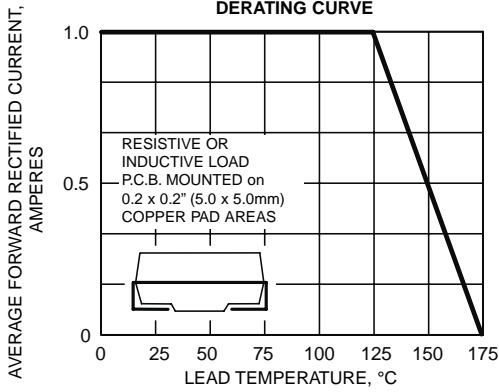
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	EGF1A	EGF1B	EGF1C	EGF1D	Unit
	Marking	EA	EB	EC	ED	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	150	200	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	105	140	V
Average Rectified Output Current @ T <sub>T</sub> = 75°C	I <sub>o</sub>	1.0				A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave Superimposed on Rated Load	I <sub>FSM</sub>	30				A
(JEDEC Method) Forward Voltage Drop @ I <sub>F</sub> = 1.0A	V <sub>FM</sub>	1.0				V
Peak Reverse Current @ T <sub>A</sub> = 25°C at Rated DC Blocking Voltage @ T <sub>A</sub> = 125°C	I <sub>RM</sub>	5.0 50				μA
Reverse Recovery Time (Note 2)	t <sub>rr</sub>	50				ns
Typical Junction Capacitance (Note 1)	C <sub>j</sub>	15				pF
Typical Thermal Resistance, Junction to Terminal	R <sub>θJT</sub>	30				°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +150				°C

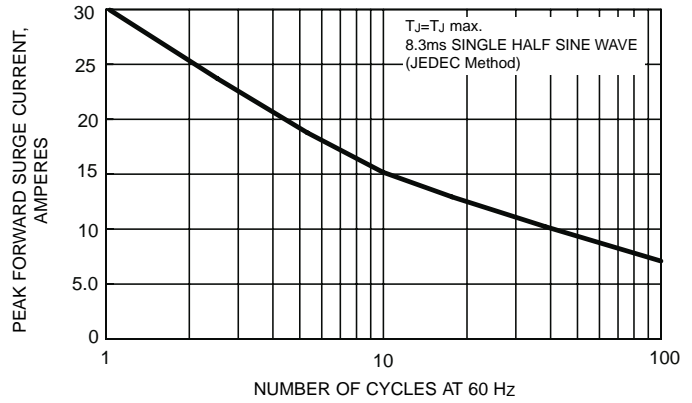
Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>rr</sub> = 0.25A.

## RATINGS AND CHARACTERISTICS CURVES EGF1A THRU EGF1D

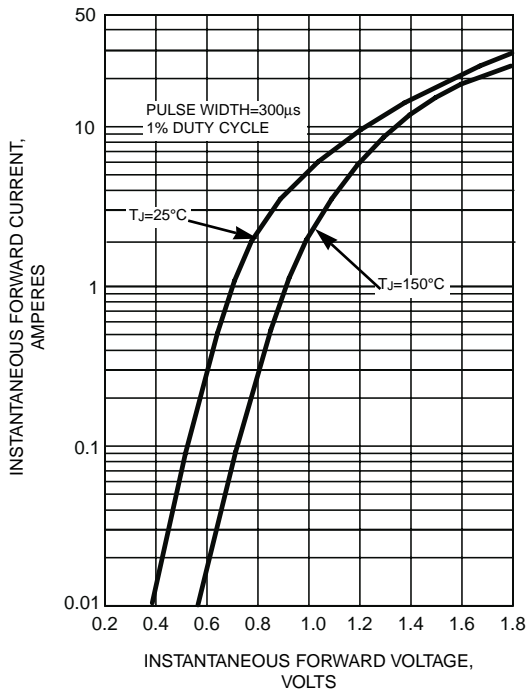
**FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE**



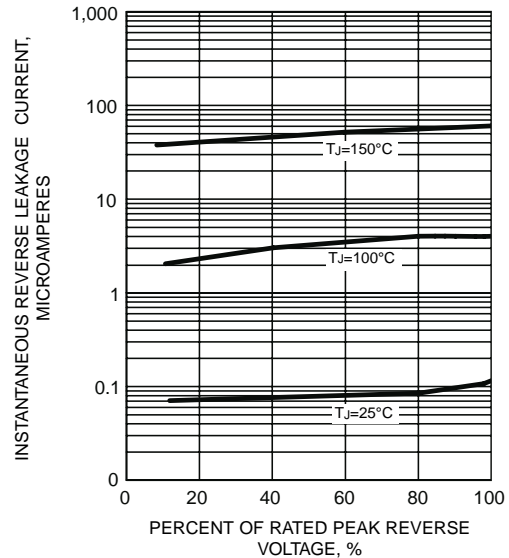
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



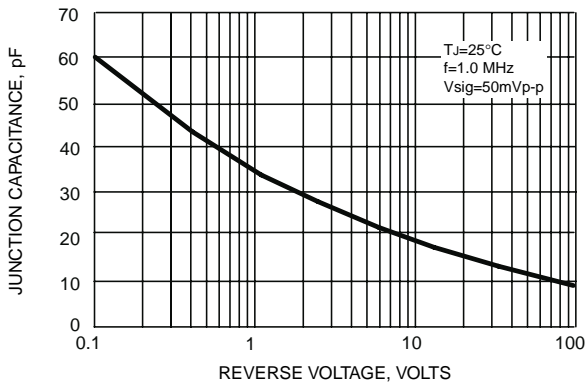
**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**



**FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE**

