



EGF1A THRU EGF1M

1.0 AMP. Surface Mount Glass Passivated Junction High Efficient Rectifiers



Voltage Range
50 to 1000 Volts
Current
1.0 Ampere

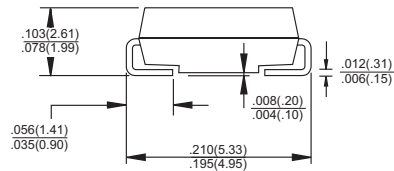
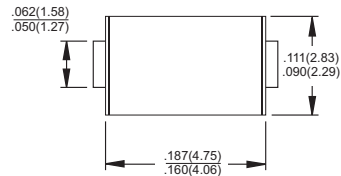
Features

- ✦ Ideal for surface mount automotive applications
- ✦ Glass passivated cavity-free junction
- ✦ Easy pick and place
- ✦ Capable of meeting environmental standard of MIL-S-19500
- ✦ Plastic material used carries Underwriters Laboratory Classification 94V-O
- ✦ Complete device submersible temperature of 265°C for 10 sec in solder bath.

Mechanical Data

- ✦ Case: Molded plastic
- ✦ Terminals: Solder plated
- ✦ Polarity: Indicated by cathode band
- ✦ Packaging: 12mm tape per EIA STD RS-481
- ✦ Weight: 0.120 gram

SMA/DO-214AC



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	EGF 1A	EGF 1B	EGF 1C	EGF 1D	EGF 1G	EGF 1J	EGF 1K	EGF 1M	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_L = 125^\circ\text{C}$	$I_{(AV)}$	1.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	30								A
Maximum Instantaneous Forward Voltage @ 1.0A	V_F	1.0		1.3		1.7			V	
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	I_R	5 100								uA uA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	50					75			nS
Typical Junction Capacitance (Note 2)	C_j	15								pF
Typical Thermal Resistance (Note 3)	$R_{\theta_{JA}}$ $R_{\theta_{JL}}$	85.0 30.0								°C/W
Operating Temperature Range	T_J	-65 to +175								°C
Storage Temperature Range	T_{STG}	-65 to +175								°C

Notes: 1. Reverse Recovery Test Conditions: $I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$

2. Measured at 1 MHz and Applied $V_R = 4.0$ Volts

3. Thermal Resistance from Junction to Ambient and from Junction to Lead P.C.B. Mounted on 0.2 x 0.2" (5.0 x 5.0mm) Copper Pad Areas.

RATINGS AND CHARACTERISTIC CURVES (EGF1A THRU EGF1M)

