## **ERA10MEGF**

#### SINTERED GLASS JUNCTION FAST SWITCHING PLASTIC RECTIFIER VOLTAGE: 1000V CURRENT: 1.0A

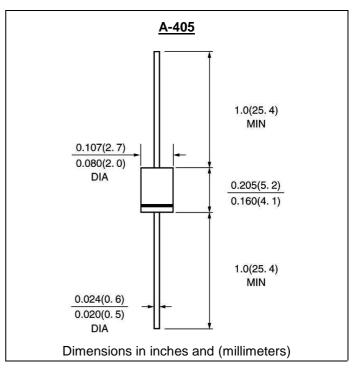


### FEATURE

High temperature metallurgically bonded construction Sintered glass cavity free junction Capability of meeting environmental standard of MIL-S-19500 High temperature soldering guaranteed  $350^{\circ}$ C /10sec/0.375"lead length at 5 lbs tension Operate at Ta =55°C with no thermal run away Typical Ir<0.2 $\mu$ A Low power loss, high efficient

### **MECHANICAL DATA**

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy Polarity: color band denotes cathode Mounting position: any



# MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

|  | SYMBOL   | ERA 10M EGF | units    |
|--|----------|-------------|----------|
| Maximum Recurrent Peak Reverse Voltage   | Vrrm     | 1000        | V        |
| Maximum RMS Voltage  | Vrms     | 700         | V        |
| Maximum DC blocking Voltage  | Vdc      | 1000        | V        |
| Maximum Average Forward Rectified<br>Current 3/8"lead length at Ta =55°C                     | lf(av)   | 1.0         | A        |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load            | lfsm     | 30          | А        |
| Maximum Forward Voltage at rated Forward Current and 25°C                                    | Vf       | 1.7         | V        |
| Maximum full load reverse current full cycle average at 55°C Ambient                         | lr(av)   | 50          | μΑ       |
| Maximum DC Reverse CurrentTa = $25^{\circ}C$ at rated DC blocking voltageTa = $125^{\circ}C$ | Ir       | 10<br>50    | μΑ<br>μΑ |
| Maximum Reverse Recovery Time (Note 1)   | Trr      | 75          | nS       |
| Typical Junction Capacitance (Note 2)  | Cj       | 15          | pF       |
| Typical Thermal Resistance (Note 3)  | R(ja)    | 60          | °C<br>/W |
| Storage and Operating Temperature Range  | Tstg, Tj | -65 to +175 | °C       |

Note:

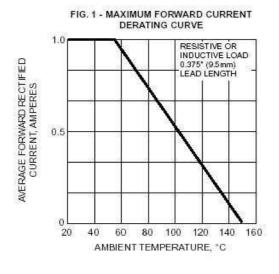
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A

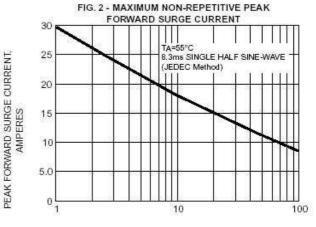
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc

3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

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#### RATINGS AND CHARACTERISTIC CURVES ERA10MEGF





NUMBER OF CYCLES AT 60 Hz

FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

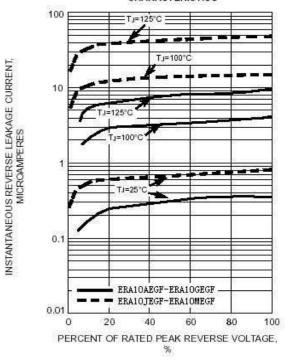


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

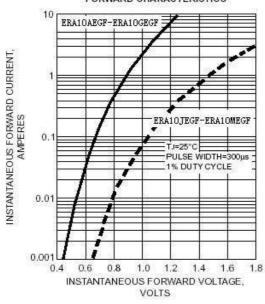
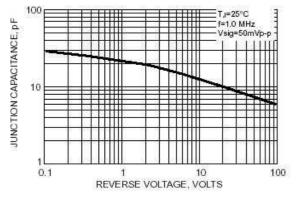


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



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