

## EU02D THRU EU02J

### Glass Passivated Junction

### Ultra Fast Recovery Plastic Rectifiers

VOLTAGE: 200 TO 600V

CURRENT: 1.0A

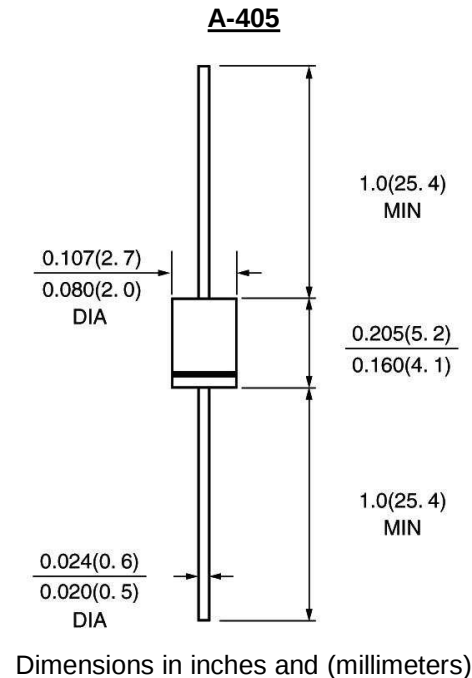


#### FEATURE

Low power loss  
High surge capability  
Glass passivated chip junction  
Ultra-fast recovery time for high efficiency  
High temperature soldering guaranteed  
250°C/10sec/0.375" lead length at 5 lbs tension

#### 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                            | EU02D                      | EU02G | EU02J | units |
|-----------------------------------------------------------------------------------|-----------------------------------|----------------------------|-------|-------|-------|
| Maximum Recurrent Peak Reverse Voltage                                            | V <sub>rrm</sub>                  | 200                        | 400   | 600   | V     |
| Maximum RMS Voltage                                                               | V <sub>rms</sub>                  | 140                        | 280   | 420   | V     |
| Maximum DC blocking Voltage                                                       | V <sub>dc</sub>                   | 200                        | 400   | 600   | V     |
| Maximum Average Forward Rectified Current 3/8"lead length at Ta =55°C             | I <sub>f(av)</sub>                | 1.0                        |       |       | A     |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | I <sub>fsm</sub>                  | 30                         |       |       | A     |
| Maximum Forward Voltage at rated Forward Current and 25°C                         | V <sub>f</sub>                    | 1.4 (I <sub>F</sub> =1.0A) |       |       | V     |
| Maximum DC Reverse Current Ta =25°C                                               | I <sub>r</sub>                    | 10                         |       |       | μA    |
| at rated DC blocking voltage Ta =125°C                                            |                                   | 50                         |       |       | μA    |
| Maximum Reverse Recovery Time (Note 1)                                            | T <sub>rr</sub>                   | 100                        |       |       | nS    |
| Typical Junction Capacitance (Note 2)                                             | C <sub>j</sub>                    | 17                         |       | 15    | pF    |
| Typical Thermal Resistance (Note 3)                                               | R(ja)                             | 50                         |       | 60    | °C /W |
| Storage and Operating Temperature Range                                           | T <sub>stg</sub> , T <sub>j</sub> | -55 to +150                |       |       | °C    |

Note:

1. Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V<sub>dc</sub>
3. Thermal Resistance from Junction to Ambient at 3/8"lead length, P.C. Board Mounted

## RATINGS AND CHARACTERISTIC CURVES EU02D THRU EU02J

1

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE

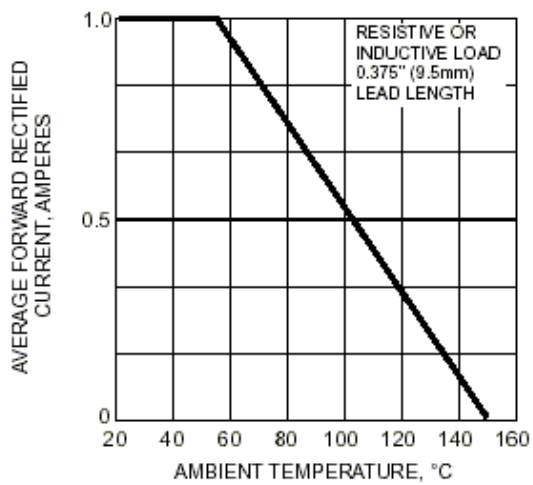


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

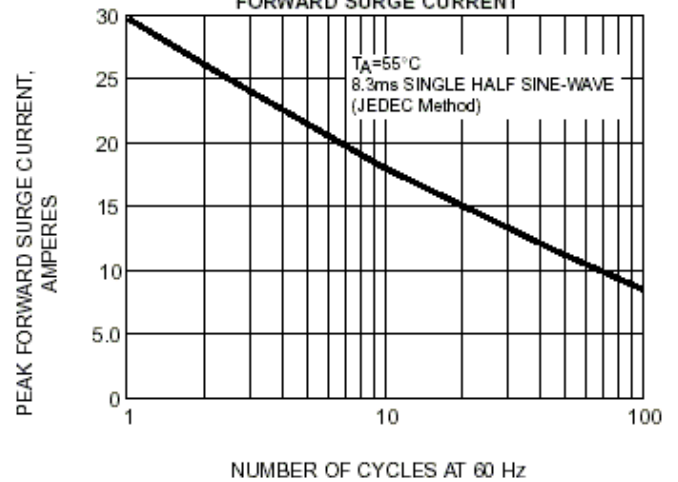


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

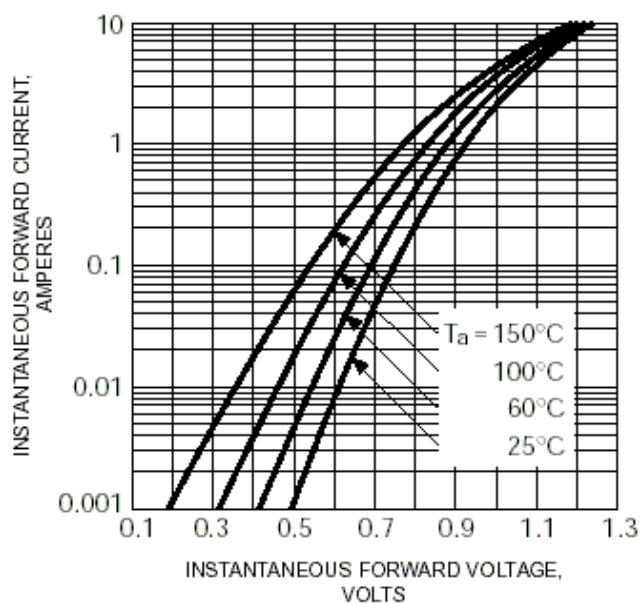


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

