

VOLTAGE RANGE: 50 - 1000V
CURRENT: 1.0 A

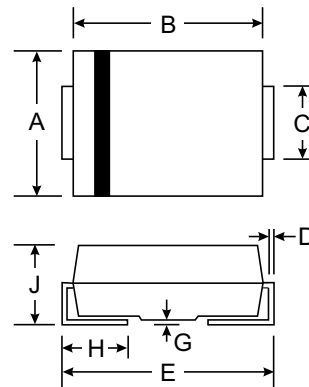
Features

- Diffused junction
- For surface mounted applications
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0



Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)



| 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_A = 25°C unless otherwise specified

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

| Characteristic | Symbol | MRA4001 | MRA4002 | MRA4003 | MRA4004 | MRA4005 | MRA4006 | MRA4007 | Unit |
|--|-------------------|-------------|---------|---------|---------|---------|---------|---------|------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current @ T _L =100 °C | I _(AV) | 1.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method) | I _{FSM} | 30 | | | | | | | A |
| Maximum Forward Voltage at 1.0A DC | V _F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current @ T _J =25°C at Rated DC Blocking Voltage @ T _J =100°C | I _R | 5.0 100 | | | | | | | uA |
| Typical Junction Capacitance (Note1) | C _J | 10 | | | | | | | pF |
| Typical Thermal Resistance (Note2) | R _{JC} | 30 | | | | | | | °C/W |
| Operating Temperature Range | T _J | -55 to +125 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -55 to +125 | | | | | | | °C |

NOTES:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

2.Thermal resistance junction to lead.

FIG. 1 - FORWARD CURRENT DERATING CURVE

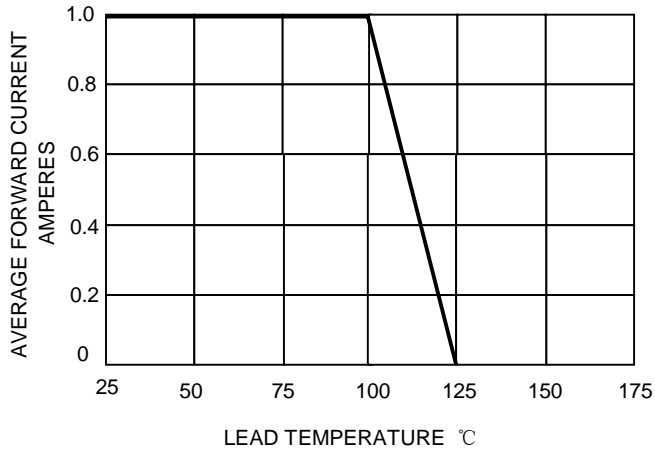


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

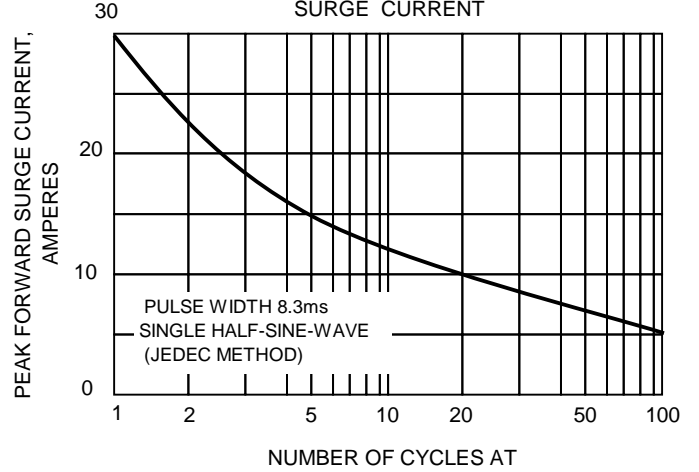


FIG.3-TYPICAL FORWARD CHARACTERISTICS

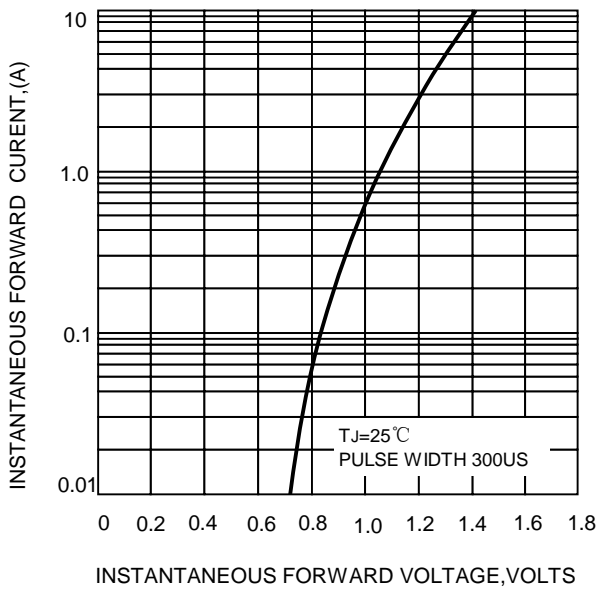


FIG.4-TYPICAL REVERSE CHARACTERISTICS

