

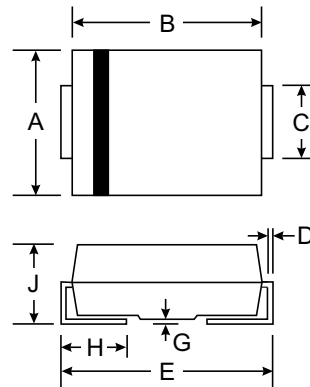
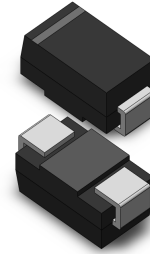
VOLTAGE RANGE: 20 - 100V
CURRENT: 1.0 A

Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O

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 | MBRA 120 | MBRA 130 | MBRA 140 | MBRA 150 | MBRA 160 | MBRA 180 | MBRA 190 | MBRA 1100 | Unit |
|--|--------------------------------------|-------------|----------|----------|----------|----------|----------|----------|-----------|------|
| Peak Repetitive Reverse Voltage | V _{RRM} | | | | | | | | | |
| Working Peak Reverse Voltage | V _{RWM} | 20 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | V |
| DC Blocking Voltage | V _R | | | | | | | | | |
| RMS Reverse Voltage | V _{R(RMS)} | 14 | 21 | 28 | 35 | 42 | 56 | 64 | 71 | V |
| Average Rectified Output Current @T _L = 75°C | I _O | 1.0 | | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 30 | | | | | | | | A |
| Forward Voltage @I _F = 1.0A | V _{FM} | 0.50 | | | 0.70 | | 0.85 | | | V |
| Peak Reverse Current @T _A = 25°C | I _{RM} | 0.5 | | | | | | | | mA |
| At Rated DC Blocking Voltage @T _A = 100°C | | 20 | | | | | | | | |
| Typical Thermal Resistance (Note 1) | R _{θJL} R _{θJA} | 28 88 | | | | | | | | °C/W |
| Operating Temperature Range | T _j | -65 to +125 | | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -65 to +150 | | | | | | | | °C |

Note: 1. Mounted on P.C. Board with 5.0mm² copper pad area.



RATING AND CHARACTERISTIC CURVES (MBRA120 - MBRA1100)

FIG.1 - FORWARD CURRENT DERATING CURVE

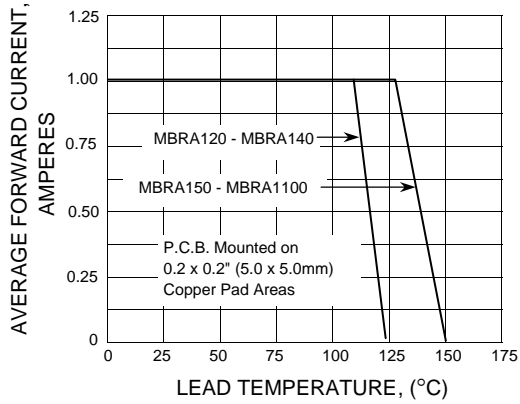


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

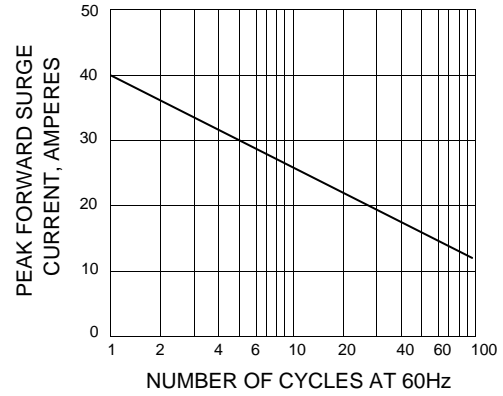


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

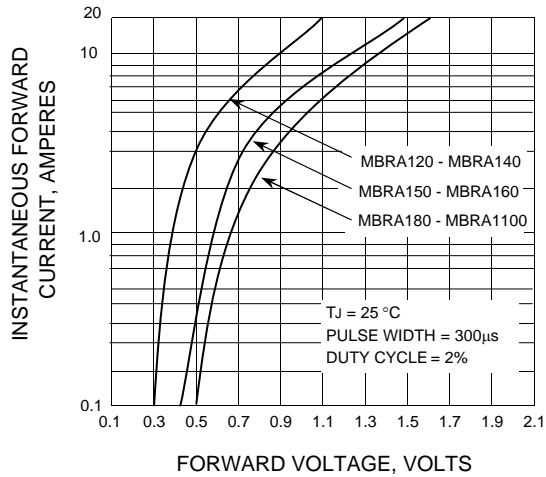


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

