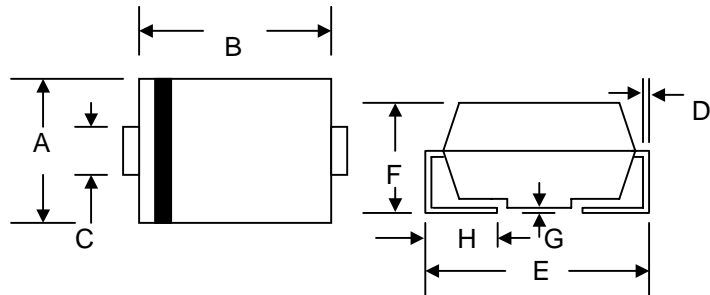


Data Sheet 2804 Rev.—

Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 50A Peak
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability
- Classification Rating 94V-0



Mechanical Data

- Case: Low Profile Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.093 grams (approx.)

| SMB/DO-214AA | | | | |
|--------------|-------|-------|---------|-------|
| Dim | Min | Max | Min | Max |
| A | 3.30 | 3.94 | 0.130 | 0.155 |
| B | 4.06 | 4.70 | 0.160 | 0.185 |
| C | 1.91 | 2.11 | 0.075 | 0.083 |
| D | 0.152 | 0.305 | 0.006 | 0.012 |
| E | 5.08 | 5.59 | 0.2 | 0.220 |
| F | 2.13 | 2.44 | 0.084 | 0.096 |
| G | 0.051 | 0.203 | 0.002 | 0.008 |
| H | 0.76 | 1.27 | 0.029 | 0.05 |
| | in mm | | In inch | |

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

| Characteristic | Symbol | SS22 | SS23 | SS24 | SS25 | SS26 | SS28 | SS29 | SS210 | Unit |
|---|---------------------|-------------|------|------|------|------|------|------|-------|------|
| Peak Repetitive Reverse Voltage | V _{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | V |
| Working Peak Reverse Voltage | V _{RWM} | | | | | | | | | |
| DC Blocking Voltage | V _R | | | | | | | | | |
| RMS Reverse Voltage | V _{R(RMS)} | 14 | 21 | 28 | 35 | 42 | 56 | 64 | 80 | V |
| Average Rectified Output Current @T _L = 105°C | I _O | 2.0 | | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 50 | | | | | | | | A |
| Forward Voltage @I _F = 2.0A | V _{FM} | 0.50 | | 0.70 | | 0.85 | | | | V |
| Peak Reverse Current @T _A = 25°C | I _{RM} | 0.4 | | | | | | | | mA |
| At Rated DC Blocking Voltage @T _A = 100°C | | 10 | | | | | | | | |
| Typical Thermal Resistance Junction to Ambient (Note 1) | R _{THJA} | 75 | | | | | | | | °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 8.0mm² copper pad areas

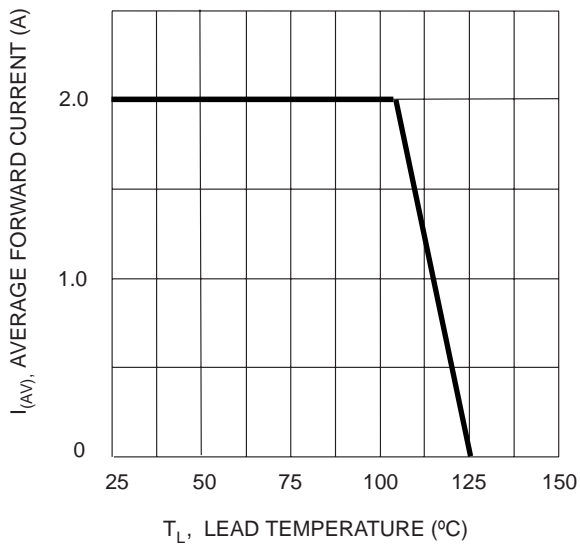


Fig. 1 Forward Current Derating Curve

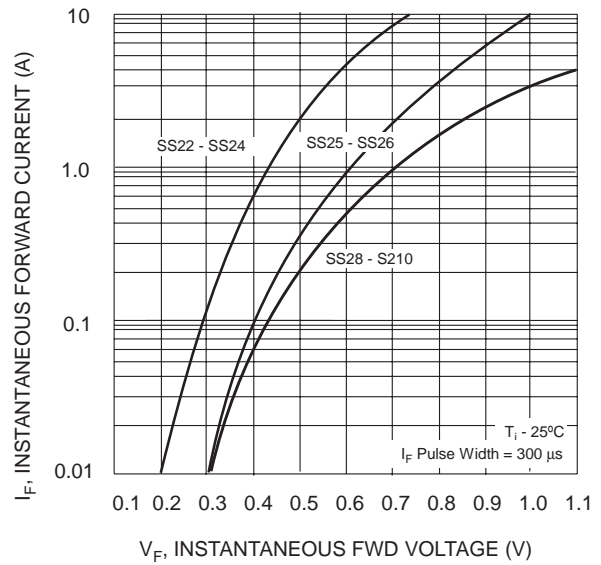


Fig. 2 Typ. Forward Characteristics

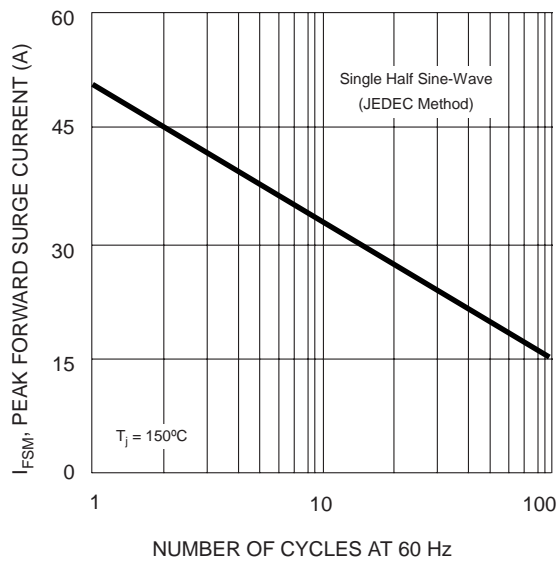


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

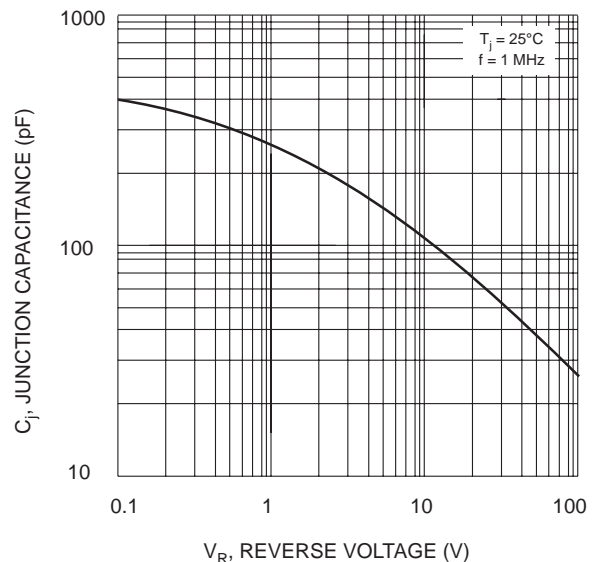


Fig. 4 Typical Junction Capacitance

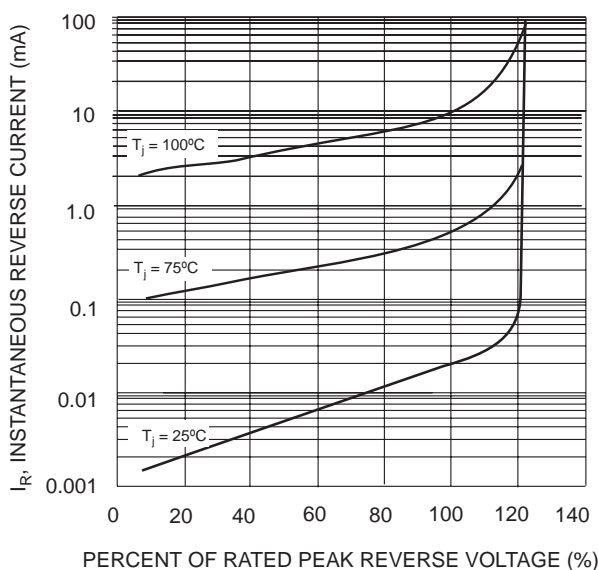


Fig. 5 Typical Reverse Characteristics