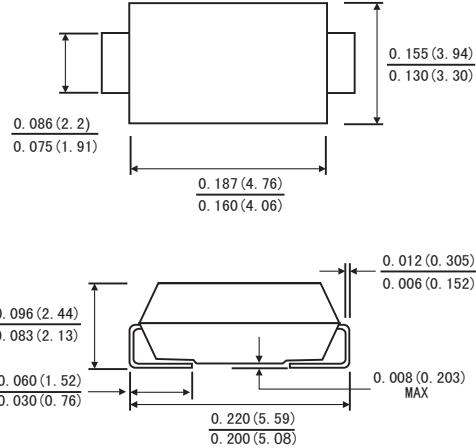


| | |
|---|--|
| SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER | Reverse Voltage - 20 to 200 Volts Forward Current -5.0 Amperes |
| <p style="text-align: center;">DO-214AA/SMB</p>  <p>Dimensions in inches and (millimeters)</p> | <p>Features</p> <ul style="list-style-type: none"> ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0 ◆ For surface mounted applications ◆ Built-in strain relief, ideal for automated placement ◆ Low reverse leakage ◆ High forward surge current capability ◆ High temperature soldering guaranteed 250°C/10 seconds at terminals <p>Mechanical Data</p> <p>Case : Molded plastic body</p> <p>Terminals : Solder plated, solderable per MIL-STD-750, Method 2026</p> <p>Polarity : Polarity symbol marking on body</p> <p>Mounting Position : Any</p> <p>Weight : 0.0035 ounce, 0.098 grams</p> |

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

| Parameter | SYMBOLS | SS52B | SS54B | SS56B | SS58B | SS510B | SS515B | SS520B | UNITS | | |
|--|-------------------|-------------|-------|------------|-------|--------|--------|--------|-------|--|--|
| Maximum repetitive peak reverse voltage | V _{RRM} | 20 | 40 | 60 | 80 | 100 | 150 | 200 | V | | |
| Maximum RMS voltage | V _{RMS} | 14 | 28 | 42 | 56 | 70 | 105 | 140 | V | | |
| Maximum DC blocking voltage | V _{DC} | 20 | 40 | 60 | 80 | 100 | 150 | 200 | V | | |
| Maximum average forward rectified current at T _A =100°C | I _(AV) | 5.0 | | | | | | | A | | |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | I _{FSM} | 120.0 | | | | | | | A | | |
| Maximum instantaneous forward voltage at 5.0A | V _F | 0.55 | | 0.70 | 0.85 | | 0.95 | | V | | |
| Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =125°C | I _R | 0.5 50 | | 0.05 10 | | | | | mA | | |
| Typical thermal resistance | R _{QJA} | 85.0 | | | | | | | °C/W | | |
| Operating junction temperature range | T _J | -55 to +150 | | | | | | | °C | | |
| Storage temperature range | T _{STG} | -55 to +150 | | | | | | | °C | | |

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

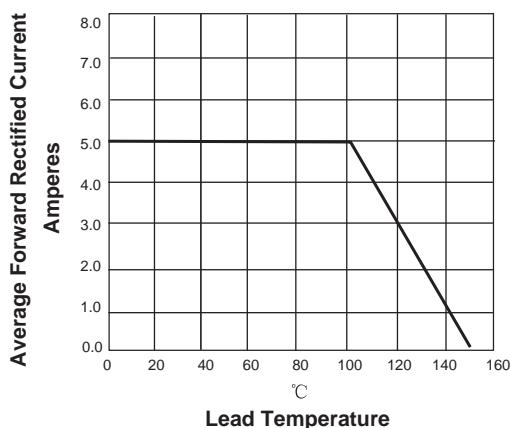


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

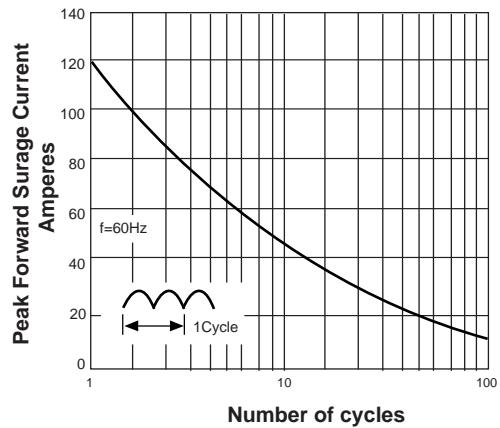


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

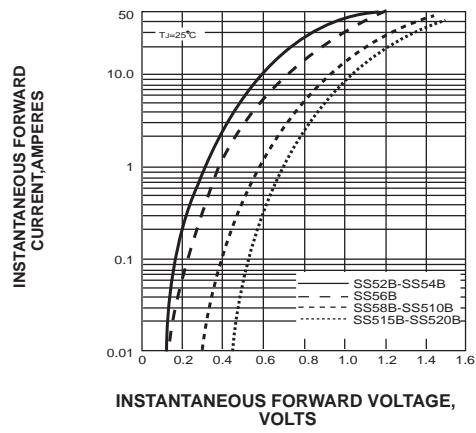


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

