

SB5150 ~ SB5200

PRV : 150 ~ 200 Volts
I_o : 5.0 Amperes

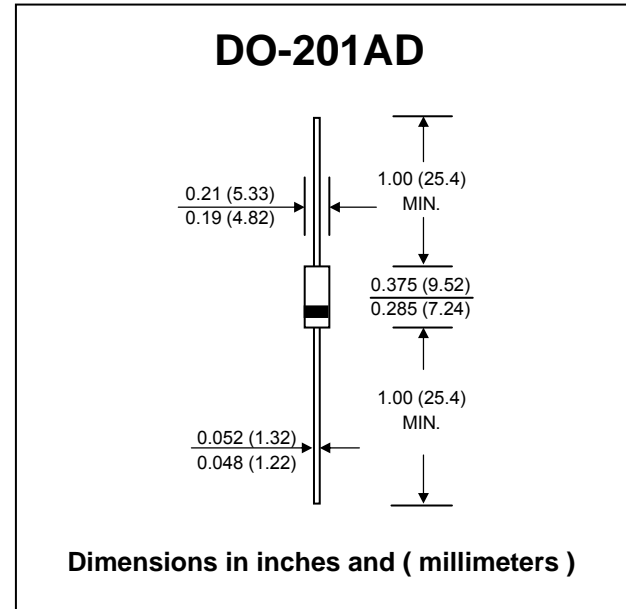
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low forward voltage drop
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : DO-201AD Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 1.1 grams

SCHOTTKY BARRIER RECTIFIER DIODE



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

| RATING | SYMBOL | SB5150 | SB5200 | UNIT |
|---|--------------------|---------------|--------|------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 150 | 200 | V |
| Maximum RMS Voltage | V _{RMS} | 105 | 140 | V |
| Maximum DC Blocking Voltage | V _{DC} | 150 | 200 | V |
| Maximum Average Forward Current 0.375", 9.5mm Lead Length See Fig.1 | I _{F(AV)} | 5.0 | | A |
| Maximum Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC Method) | I _{FSM} | 100 | | A |
| Maximum Forward Voltage at I _F = 5 A (Note 1) | V _F | 0.85 | 0.87 | V |
| Maximum Reverse Current at Ta = 25 °C | I _R | 0.01 | | mA |
| Rated DC Blocking Voltage (Note 1) Ta = 100 °C | I _{R(H)} | 10 | | mA |
| Typical Thermal Resistance | R _{θJA} | 10 | | °C/W |
| Operating Temperature Range | T _J | - 50 to + 125 | | °C |
| Storage Temperature Range | T _{STG} | - 65 to + 150 | | °C |

Note : (1) Pulse Test : Pulse Width = 380 μs, Duty Cycle = 2%.

RATING AND CHARACTERISTIC CURVES (SB5150~SB5200)

FIG.1 - FORWARD CURRENT DERATING CURVE

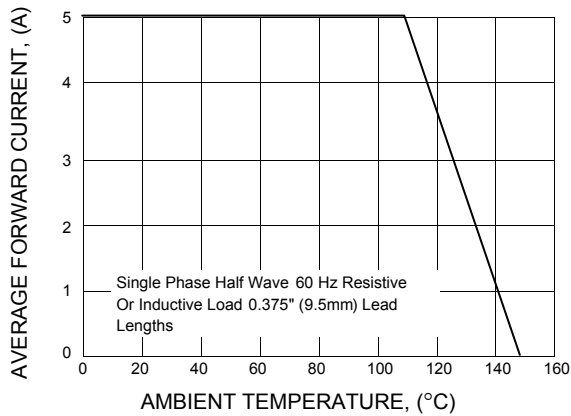


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

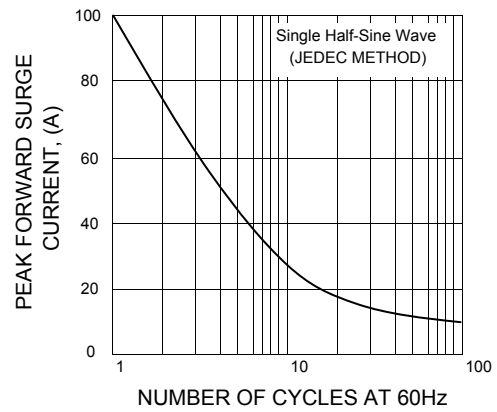


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

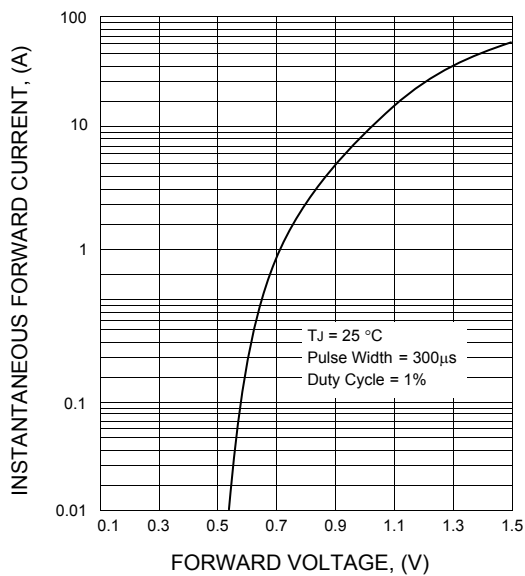


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

