



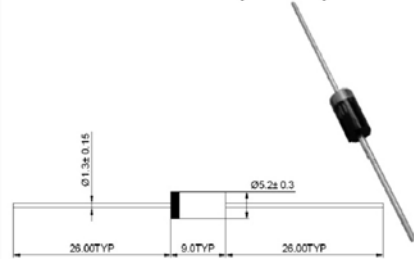
5A SCHOTTKY BARRIER RECTIFIER

Reverse Voltage 40 Volts Forward Current 5.0 Amperes

Features

- Metal silicon junction, majority carrier conduction
- Guardring for overvoltage protection
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection application

DO-201AD (DO-27)



Mechanical Data

- Case: DO-201AD(DO-27) molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.04 ounce, 1.10 grams (approximate)

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

| PARAMETER | SYMBOL | SB540L | UNITS |
|--|-----------------|-------------|--------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 40 | V |
| Maximum RMS voltage | V_{RMS} | 28 | V |
| Maximum DC blocking voltage | V_{DC} | 40 | V |
| Average Rectified Output Current 0.375" (9.5mm) lead length | I_o | 5.0 | A |
| Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load | I_{FSM} | 80 | A |
| Maximum instantaneous forward voltage at $I_o=5A$ | V_F | 0.46 | V |
| Maximum DC reverse current @ $T_a=25^\circ C$ @ rated DC blocking voltage @ $T_a=100^\circ C$ | I_R | 0.5 20.0 | mA |
| Typical thermal resistance (Note 1) | $R_{\theta JA}$ | 20 | $^\circ C/W$ |
| Operating junction temperature range | T_J | -55 to +125 | $^\circ C$ |
| Storage temperature range | T_{STG} | -55 to +150 | $^\circ C$ |

Notes:

1. Thermal Resistance from Junction to Ambient 0.375" (9.5mm) lead length.



RATINGS AND CHARACTERISTIC CURVES

FIG. 1 – TYPICAL FORWARD CURRENT DERATING CURVE

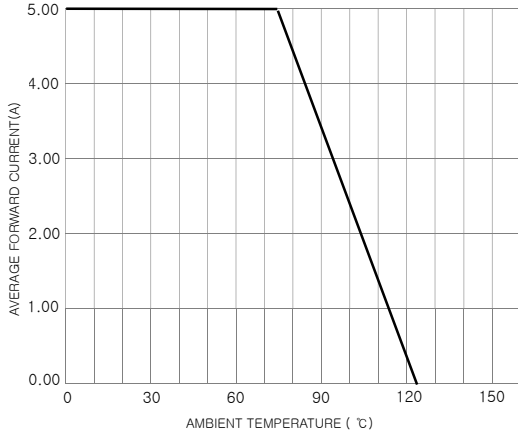


FIG. 2 – TYPICAL FORWARD CHARACTERISTICS

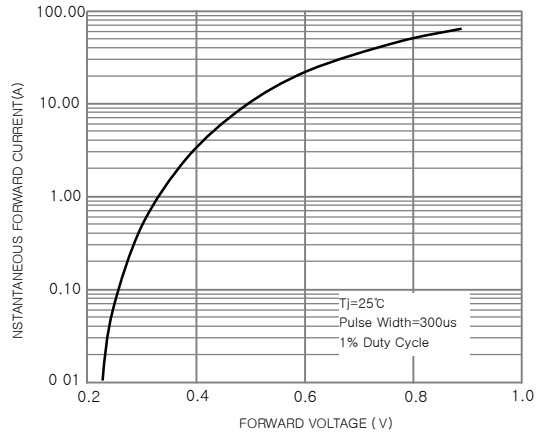


FIG. 3 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

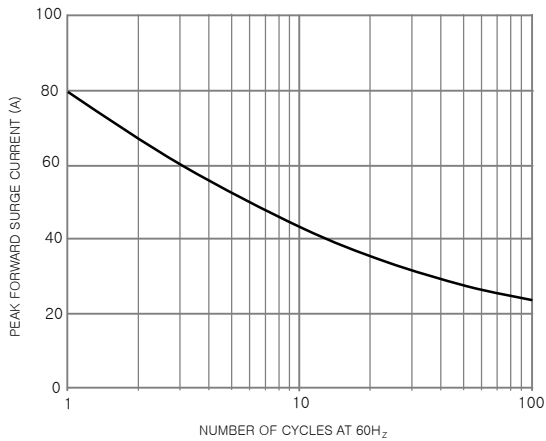


FIG. 4 – TYPICAL REVERSE CHARACTERISTICS

