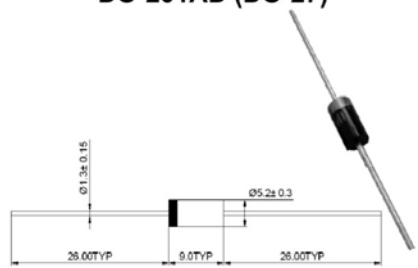
5A SCHOTTKY BARRIER RECTIFIER

Reverse Voltage 45 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℃ ambient temperature unless otherwise specified)

PARAMETER	SYMBOL	SB540L	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	45	V
Maximum RMS voltage	V_{RMS}	32	V
Maximum DC blocking voltage	V_{DC}	45	V
Average Rectified Output Current 0.375˝ (9.5mm) lead length	Io	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 Io=5A	V_F	0.46	V
Maximum DC reverse current @ Ta=25℃ at rated DC blocking voltage @ Ta= 100℃	I_R	0 5 20.0	mA
Typical thermal resistance (Note 1)	$R_{\theta JA}$	20	℃/W
Operating junction temperature range	T_J	- 55 to +125	℃
Storage temperature range	T_{STG}	- 55 to +150	℃

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

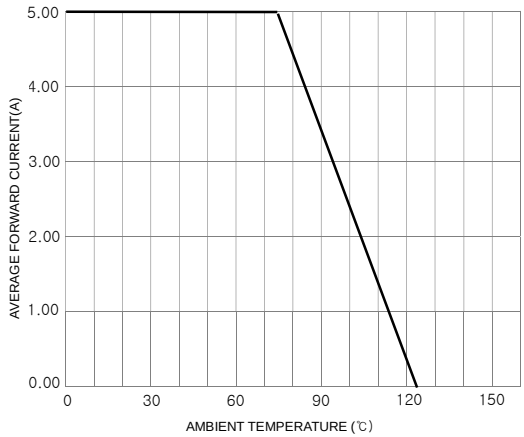


FIG. 2 – TYPICAL FORWARD CHARACTERISTICS

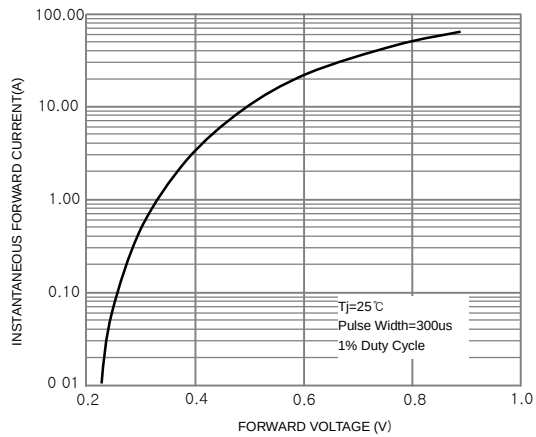


FIG. 3 – MAX MUM NON-REPETITIVE FORWARD SURGE CURRENT

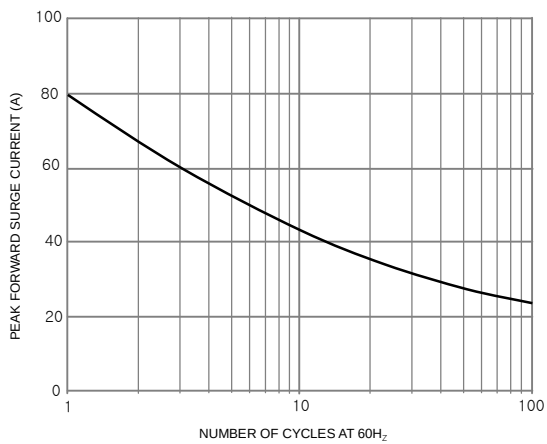


FIG. 4 – TYPICAL REVERSE CHARACTERISTICS