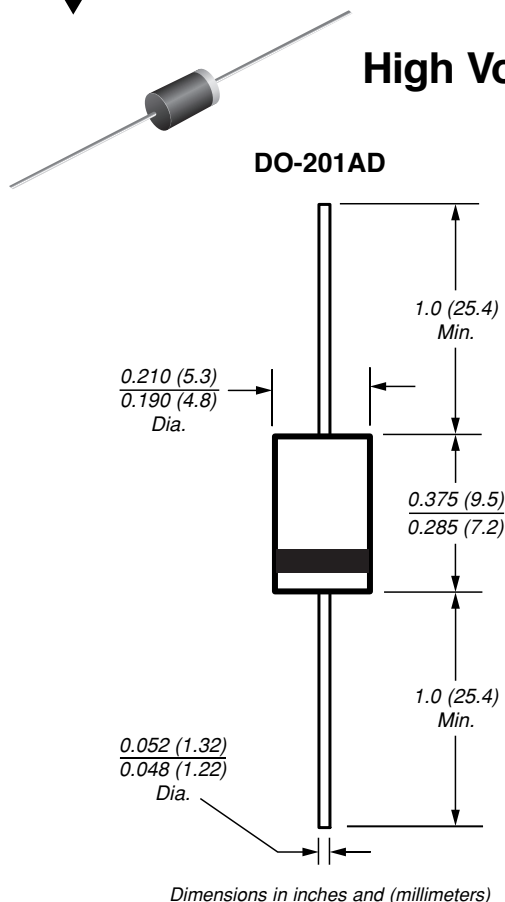


**High Voltage Schottky Rectifier****Reverse Voltage** 90 to 100V
Forward Current 5.0A**Features**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Guardring for overvoltage protection

Mechanical Data**Case:** JEDEC DO-201AD molded plastic body**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026High temperature soldering guaranteed:
250°C/10 seconds, 0.375" (9.5mm) lead length, 5lbs (2.3kg tension)**Polarity:** Color band denotes cathode end**Mounting Position:** Any**Weight:** 0.04 oz., 1.12 g**Maximum Ratings and Thermal Characteristics** ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	SB5H90	SB5H100	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	90	100	V
Working peak reverse voltage	V_{RWM}	90	100	V
Maximum DC blocking voltage	V_{DC}	90	100	V
Maximum average forward rectified current at $T_C = 80^\circ\text{C}$	$I_{F(AV)}$	5.0		A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200		A
Peak repetitive reverse surge current at $t_p = 2.0\mu\text{s}$, 1KHz	I_{RRM}	1.0		A
Maximum thermal resistance ⁽²⁾	$R_{\theta JA}$ $R_{\theta JL}$	25 8		$^\circ\text{C/W}$
Storage temperature range	T_{STG}	-55 to +175		$^\circ\text{C}$
Maximum operating junction temperature	T_J	175		$^\circ\text{C}$

Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Maximum instantaneous forward voltage at: ⁽¹⁾	$I_F = 5.0\text{A}$, $T_A = 25^\circ\text{C}$ $I_F = 5.0\text{A}$, $T_A = 125^\circ\text{C}$	V_F	0.80 0.70	V
Maximum DC reverse current at rated DC blocking voltage ⁽¹⁾	$T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	I_R	200 10	μA mA

Notes: (1) Pulse test: 300 μs pulse width, 1% duty cycle

(2) P.C.B. mounted with 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig. 1 – Forward Current Derating Curve

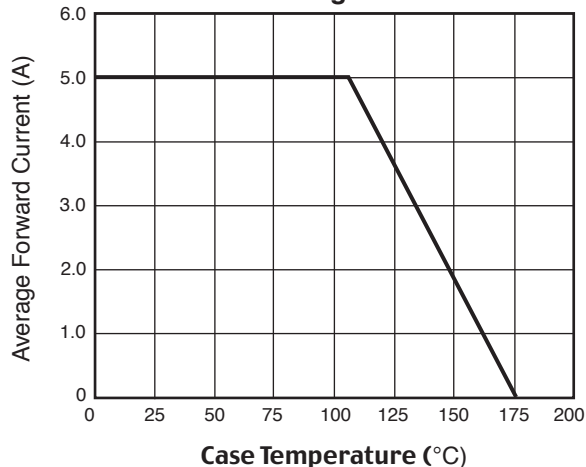


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

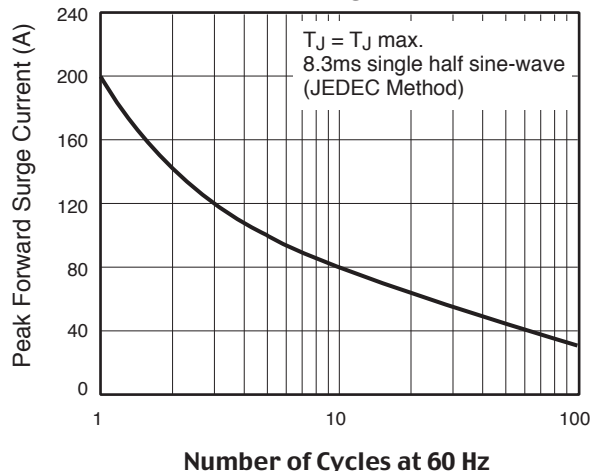


Fig. 3 – Typical Instantaneous Forward Characteristics

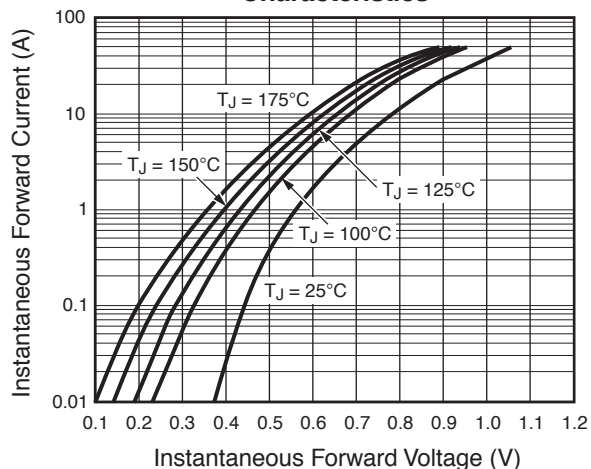


Fig. 4 – Typical Reverse Characteristics

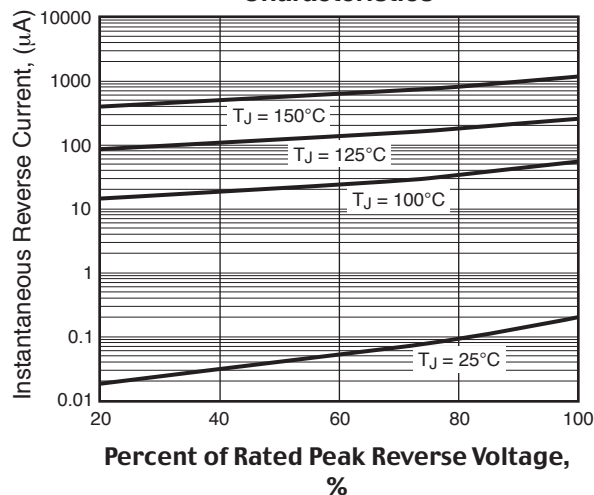


Fig. 5 - Typical Transient Thermal Impedance

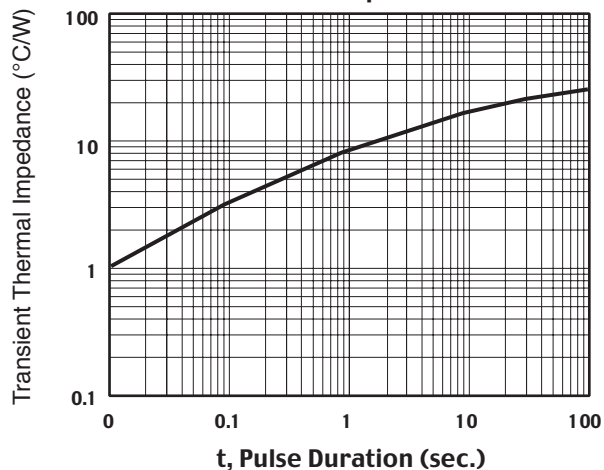


Fig. 6 – Typical Junction Capacitance

