

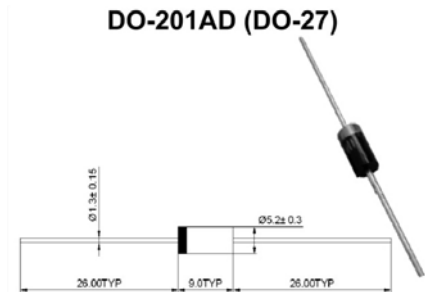


**MEDIUM CURRENT SCHOTTKY BARRIER RECTIFIER**

**Reverse Voltage 20 to 200 Volts, Forward Current 3.0 Ampere**

**Features**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low  $V_F$
- High surge capacity
- Epitaxial construction
- Guardring for transient protection
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed:  
250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3Kg) tension



**Mechanical Data**

- **Case:** DO-201AD molded plastic body
- **Terminals:** Plated axial leads, solderable per MIL-STD-750, method 2026
- **Polarity:** Color band denotes cathode
- **Mounting Position:** Any
- **Weight:** 0.041 ounce, 1.15 grams

**Maximum Ratings and Electrical Characteristics**

Ratings at 25°C ambient temperature unless other wise specified.

PARAMETER	SYMBOL	SB 320	SB 330	SB 340	SB 350	SB 360	SB 380	SB 3100	SB 3150	SB 3200	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	V
Average Rectified Output Current 0.375" (9.5mm) lead length	$I_o$	3.0									A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	80									A
Maximum instantaneous forward voltage at $I_o$	$V_F$	0.50		0.70		0.85		0.88	0.90		V
Maximum DC reverse current at rated DC blocking voltage	$I_R$	0.5 10.0						0.05 10.0			mA
Typical junction capacitance (Note 1)	$C_j$	250									pF
Typical thermal resistance (Note 2)	$R_{JA}$	20.0									°C/W
Operating junction temperature range	$T_J$	-55 to +125									°C
Storage temperature range	$T_{STG}$	-55 to +150									°C

Notes:

1. Measured at 1MHz and applied reverse voltage of 4.0V DC.
2. Thermal Resistance from Junction to Ambient 0.375"(9.5mm) lead length.



**RATINGS AND CHARACTERISTIC CURVES**

FIG. 1 – TYPICAL FORWARD CURRENT DERATING CURVE

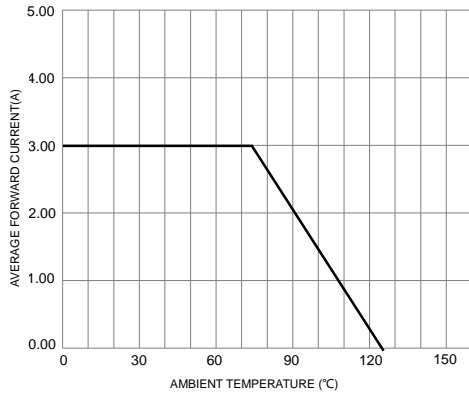


FIG. 2 – TYPICAL FORWARD CHARACTERISTICS

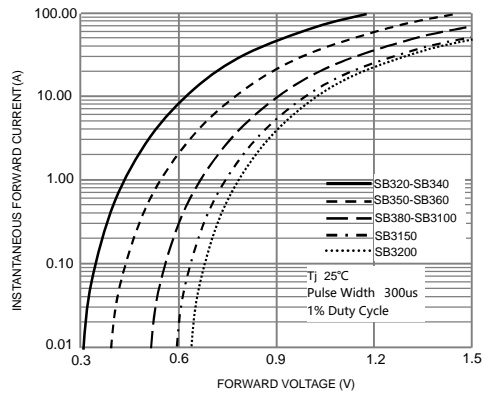


FIG. 3 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

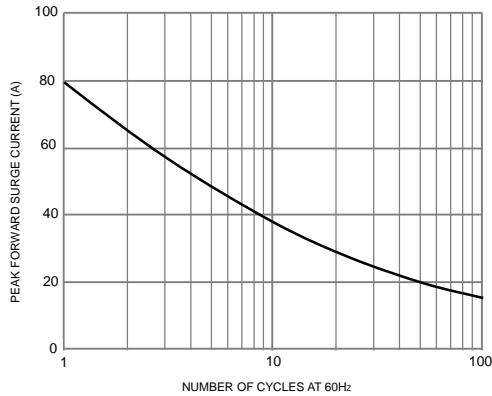


FIG. 4 – TYPICAL REVERSE CHARACTERISTICS

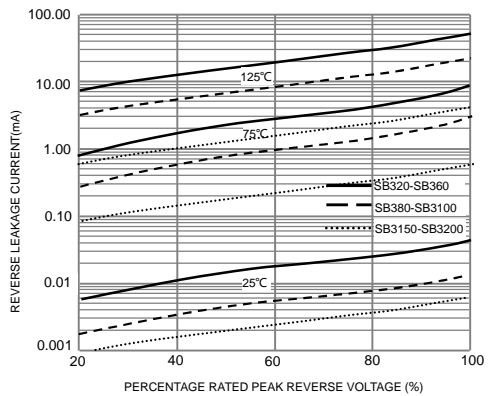


FIG. 5 – TYPICAL JUNCTION CAPACITANCE

