

**Schottky Barrier Rectifiers**

**Reverse Voltage - 20 to 200 V**

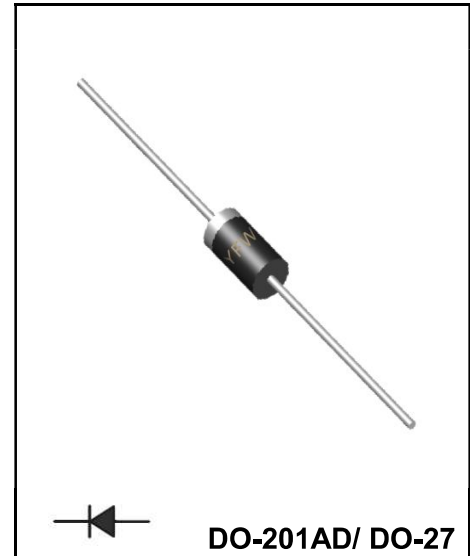
**Forward Current - 5 A**

**FEATURES**

- ◆ Guardring for overvoltage protection
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed  
250°C /10 seconds at terminals
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

**MECHANICAL DATA**

- ◆ Case: DO-201AD/ DO-27
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 0.98 g /0.0345oz



**Maximum Ratings and Electrical characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	SB520	SB540	SB560	SB580	SB5100	SB5150	SB5200	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	40	60	80	100	150	200	V
Maximum RMS voltage	$V_{RMS}$	14	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	$V_{DC}$	20	40	60	80	100	150	200	V
Maximum Average Forward Rectified Current at $T_c = 100\text{ }^\circ\text{C}$	$I_{F(AV)}$	5.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	120.0							A
Maximum Instantaneous Forward Voltage at 5.0A	$V_F$	0.55	0.70	0.85	0.95				V
Maximum DC Reverse Current $T_a = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 125\text{ }^\circ\text{C}$	$I_R$	0.5 50			0.05 10			mA	
Typical Thermal Resistance	$R_{\theta JA}$	55							$^\circ\text{C/W}$
Operating junction temperature range	$T_j$	-55 ~ +150							$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 ~ +150							$^\circ\text{C}$

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

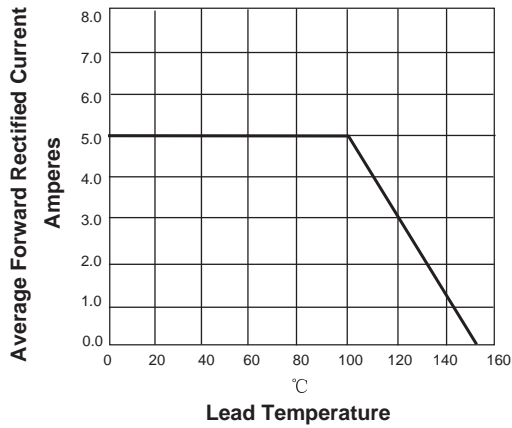


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

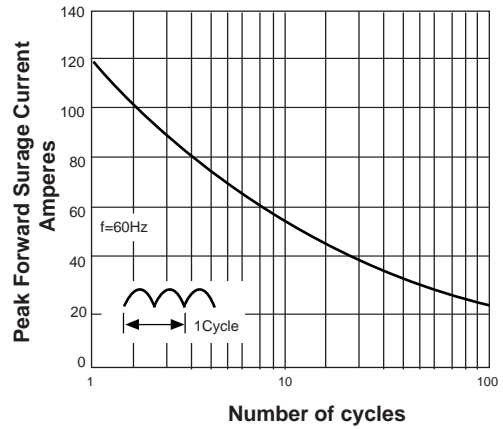


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

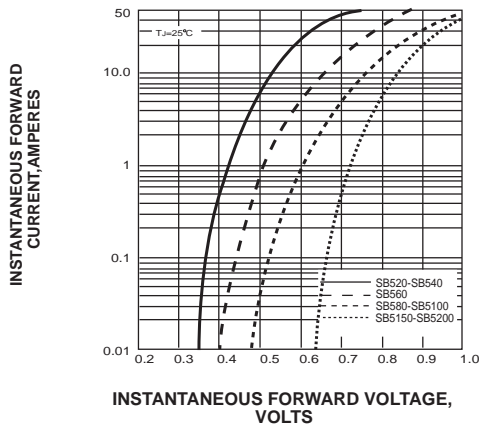
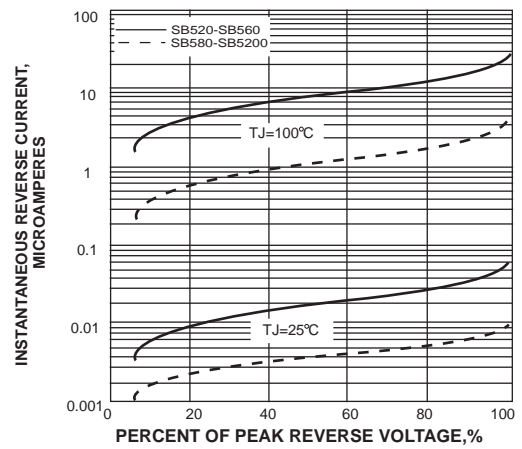


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



**Ordering information**

Package	Packing Description	Packing Quantity
DO-201AD/DO-27	bulk	250PCS/500PCS/Inner Box 12500PCS/Carton
	ammo pack	1000PCS/1250PCS/Inner Box 10000PCS/12500PCS/Carton

**Package Dimensions**

DO-201AD/DO-27

Dim.	Millimeter(mm)		INCHES	
	Min.	Max.	Min.	Max.
A	-	9.50	-	0.370
B	-	6.40	-	0.250
C	1.20	1.30	0.048	0.052
D	25.4	-	1.00	-

The diagram shows a side view of a DO-201AD/DO-27 package. It features a central cylindrical body with a diameter of B and a length of A. The body is marked with 'YFW' and 'xxxx' (representing the model name). A cathode mark is also present. Two leads extend from the body, with a thickness of C and a length of D. Dimension A is the length of the body, B is the diameter of the body, C is the thickness of the leads, and D is the length of the leads.

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