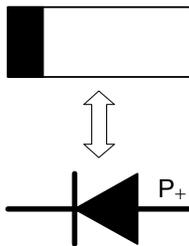


## SMD Schottky Barrier Diode

### ■ Features

$I_O = 500\text{mA}$   
 $V_R = 20\text{V}$

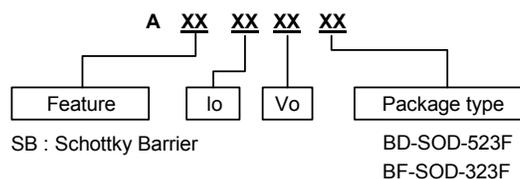
- Low forward voltage
- Designed for mounting on small surface.
- Extremely thin package.
- Majority carrier conduction.
- Lead-free device



### ■ Mechanical Data

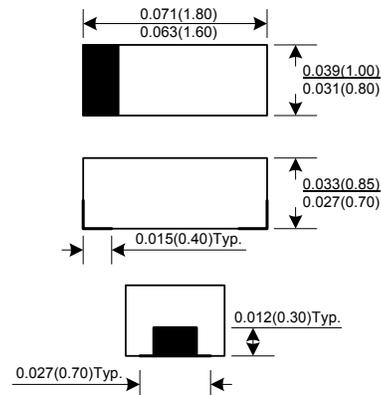
- Case : SOD-523F(1608) SOD-323F(2512)  
standard package, molded plastic.
- Terminals : Gold plated, solderable per  
MIL-STD-750, method 2026.
- Polarity : Indicated by cathode band.
- Mounting position : Any.
- Weight : BD:0.003gram (approximately)  
BF:0.006gram (approximately)

### ■ Ordering information



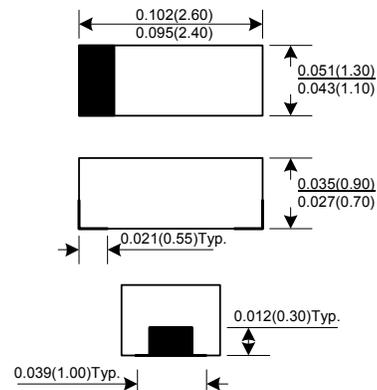
### ■ General Description

SOD-523F(1608)



Dimensions in inches and (millimeter)

SOD-323F(2512)



Dimensions in inches and (millimeter)

**SMD Schottky Barrier Diode**

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**■ Maximum Rating** (at  $T_A=25^{\circ}\text{C}$  unless otherwise noted)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
$V_{RRM}$	Repetitive peak reverse voltage		-	-	30	V
$V_R$	Reverse voltage		-	-	20	V
$I_O$	Average forward rectified current		-	-	500	mA
$I_{FSM}$	Forward current, surge peak	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	-	-	2	A
$T_{STG}$	Storage temperature		-40	-	+125	$^{\circ}\text{C}$
$T_j$	Junction temperature		-40	-	+125	$^{\circ}\text{C}$

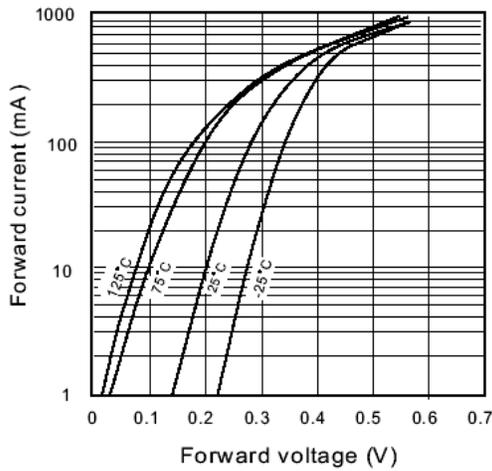
**■ Electrical Characteristics** (at  $T_A=25^{\circ}\text{C}$  unless otherwise noted)

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
$V_F$	Forward voltage	$I_F=100\text{mA}$	-	-	0.36	V
		$I_F=500\text{mA}$	-	-	0.47	
$I_R$	Reverse current	$V_R=20\text{V}$	-	-	100	$\mu\text{A}$
$C_T$	Capacitance between terminals	$f=1\text{MHz}$ , and 0 VDC reverse voltage	-	100	-	pF

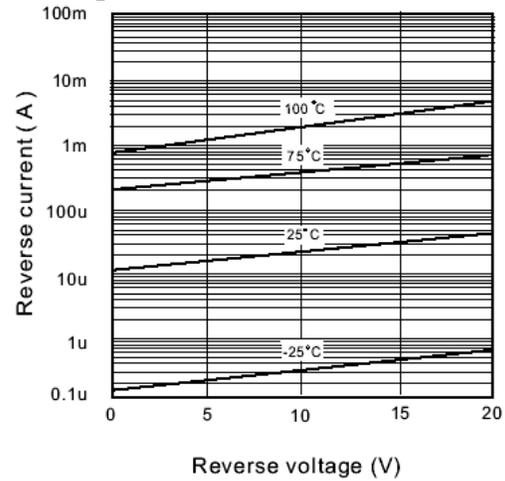
## SMD Schottky Barrier Diode

### ■ Rating And Characteristic Curves

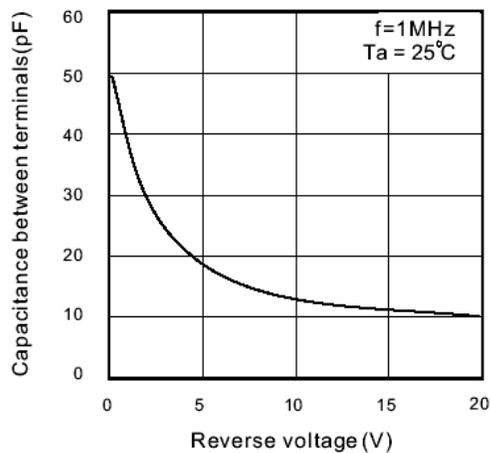
**Fig. 1 – Forward characteristics**



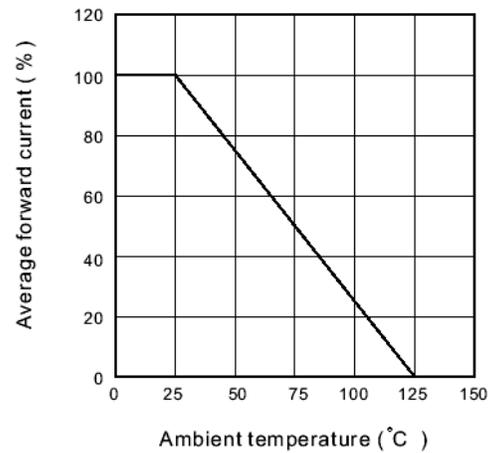
**Fig. 2 – Reverse characteristics**



**Fig. 3 – Capacitance between terminals characteristics**



**Fig. 4 – Current derating curve**



### ■ Marking Information

