



## SMD Schottky Barrier Diode

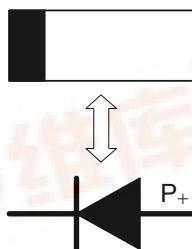
**ASB00340**

### ■ Features

$I_O = 30mA$

$V_R = 40V$

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

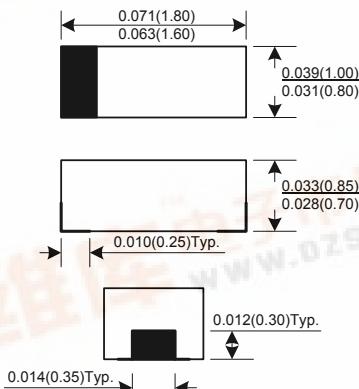


### ■ Mechanical Data

- Case :0603(1608) 1005(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)

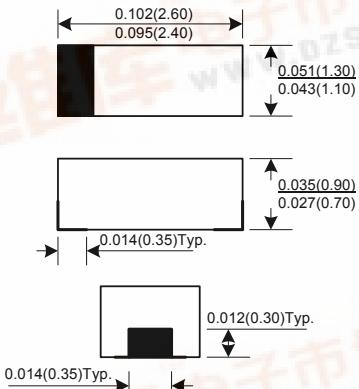
### ■ General Description

0603(1608)



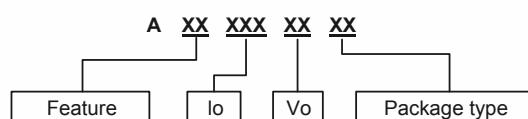
Dimensions in inches and (millimeter)

1005(2512)



Dimensions in inches and (millimeter)

### ■ Ordering information



SB : Schottky Barrier

BD-0603

BF-1005

**ASB00340****SMD Schottky Barrier Diode****■ 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			-	-	45	V
$V_R$	Reverse voltage			-	-	40	V
$I_o$	Average forward current			-	-	30	mA
$I_{FSM}$	Forward current, surge peak	0603	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	-	500	-	mA
		1005		-	500	-	
$P_D$	Power Dissipation	0603		-	-	150	mW
		1005		-	-	200	
$T_{STG}$	Storage temperature			-40	-	+125	°C
$T_j$	Junction temperature			-40	-	+125	°C

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

Symbol	Parameter		Conditions	Min.	Typ.	Max.	Unit
$V_F$	Forward voltage		$I_F=1\text{mADC}$	-	-	0.37	V
$I_R$	Reverse current	$V_R=30\text{V}$		-	-	0.5	$\mu\text{A}$
		$V_R=40\text{V}$		-	-	1	
$C_T$	Capacitance between terminals		$F=1\text{MHz}$ , and 1 VDC reverse voltage	-	1.5	-	pF



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## ■ Rating And Characteristic Curves

Fig. 1 - Forward characteristics

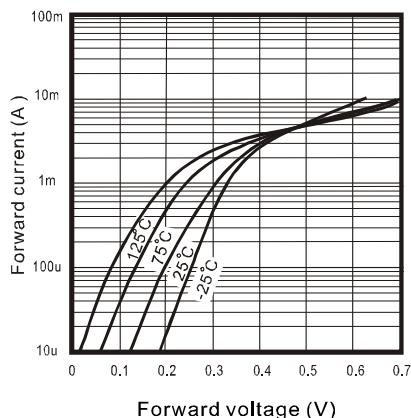


Fig. 2 - Reverse characteristics

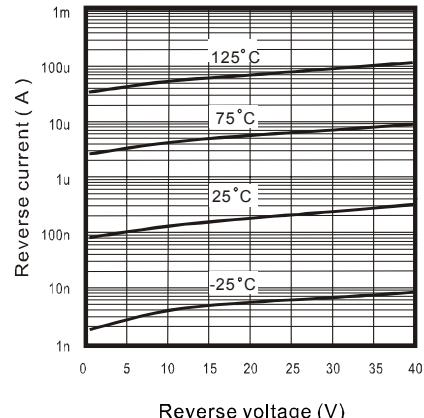


Fig. 3 - Capacitance between terminals characteristics

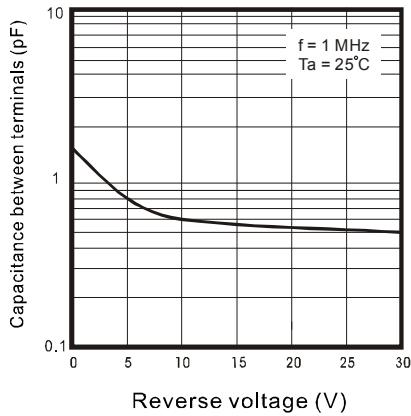
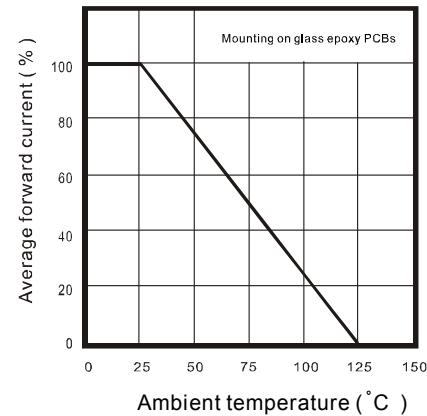


Fig. 4 - Current derating curve



## ■ Marking Information

