

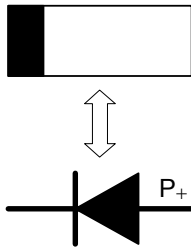
SMD Schottky Barrier Diode

■ Features

$$I_O = 350\text{mA}$$

$$V_R = 20\text{V to } 40\text{V}$$

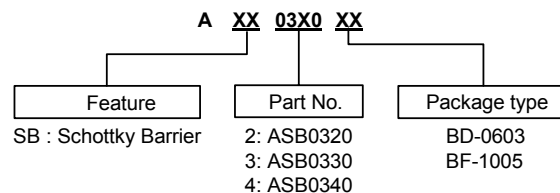
- Low forward voltage
- Designed for mounting on small surface.
- Extremely thin package.
- Majority carrier conduction.
- Lead-free device



■ Mechanical Data

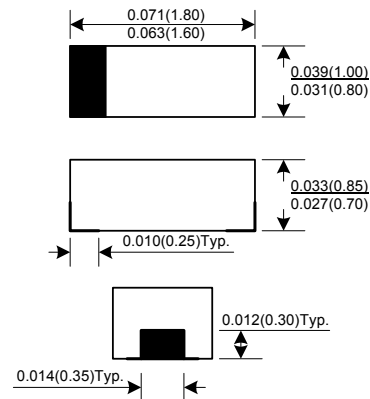
- Case : 0603(1608) 1005(2512) standard package, molded plastic.
- Terminals : Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity : Indicated by cathode band.
- Mounting position : Any.
- Weight : BD:0.003gram (approximately)
BF:0.006gram (approximately)

■ Ordering information



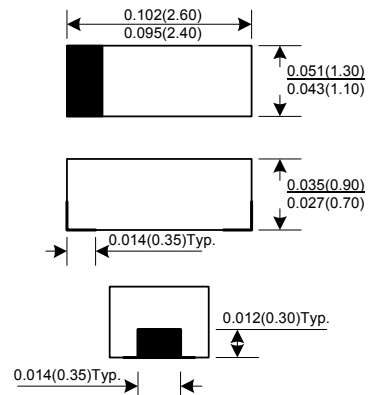
■ General Description

0603(1608)



Dimensions in inches and (millimeter)

1005(2512)



Dimensions in inches and (millimeter)



ASB0320/30/40

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

Symbol	Parameter	ASB0320	ASB0330	ASB0340	Unit
V_{RRM}, V_R	Repetitive peak reverse voltage Reverse voltage	20	30	40	V
$V_R(\text{RMS})$	RMS reverse voltage	14	21	28	V
I_O	Average forward rectified current	350			mA
I_{FRM}	Repetitive peak forward current	450			mA
I_{FSM}	Forward current, surge peak 8.3 ms single half sine-wave	1.5			A
T_{STG}	Storage temperature	-40 to +125			$^\circ\text{C}$
T_j	Junction temperature	-40 to +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	$I_F=20\text{mA}$	-	-	0.37	V
		$I_F=200\text{mA}$	-	-	0.6	
I_R	Reverse current	ASB0320 $V_R=10\text{V}$	-	-	5	μA
		ASB0330 $V_R=20\text{V}$	-	-	5	
		ASB0340 $V_R=30\text{V}$	-	-	5	
C_T	Capacitance between terminals	$f=1\text{MHz}$, and 0 VDC reverse voltage	-	50	-	pF
T_{rr}	Reverse recovery time	$I_F=I_R=10\text{mA}$, $I_{rr}=0.1 \times I_R$, $R_L=100\ \text{ohm}$	-	6.4	-	nS

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■ Rating And Characteristic Curves

Fig. 1 – Forward characteristics

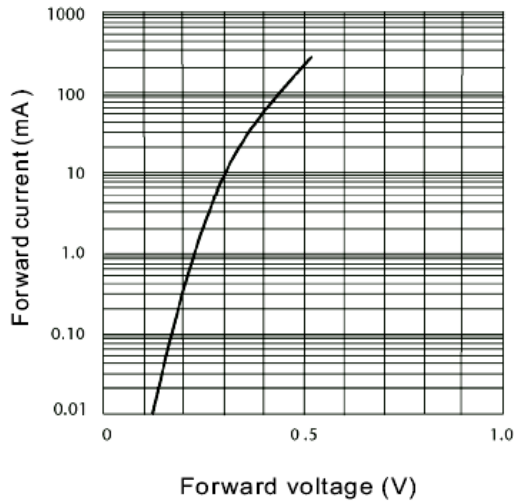


Fig. 2 – Capacitance between terminals characteristics

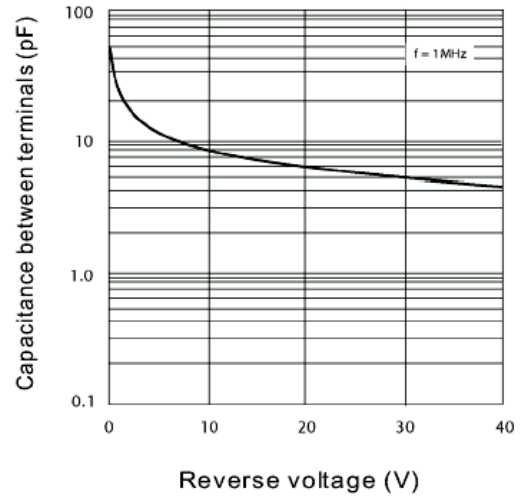
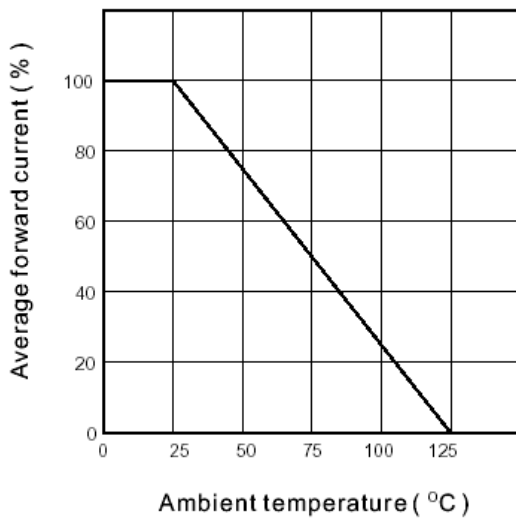





Fig. 3 – Current derating curve



■ Marking Information

	BH	ASB0320
	BJ	ASB0330
	BK	ASB0340