ASB0130

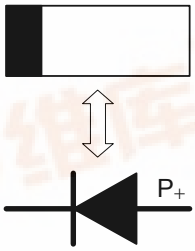
SMD Schottky Barrier Diode

■ Features

$I_O = 100mA$

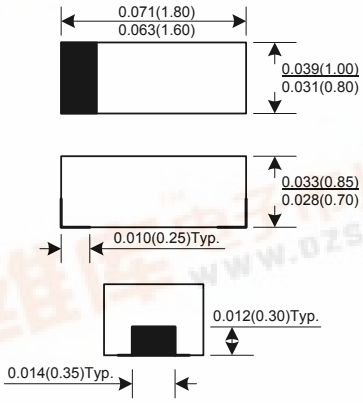
$V_R = 30V$

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



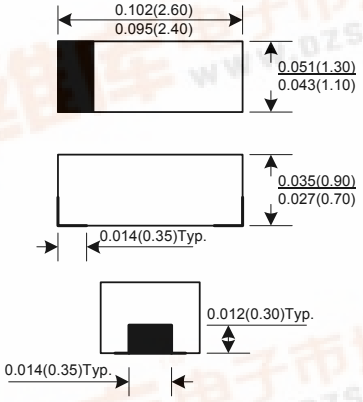
■ General Description

0603(1608)



Dimensions in inches and (millimeter)

1005(2512)

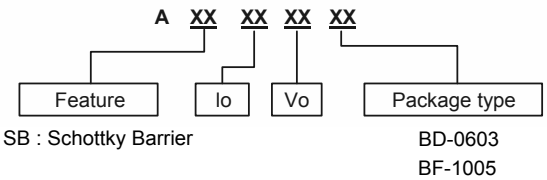


Dimensions in inches and (millimeter)

■ 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



■ Maximum Rating (at T_A=25ºC unless otherwise noted)

Symbol	Parameter		Conditions	Min	Typ	Max	Unit
V_{RRM}	Repetitive peak reverse voltage			-	-	35	V
V_R	Reverse voltage			-	-	30	V
I_O	Average forward current			-	-	100	mA
I_{FSM}	Forward current, surge peak	0603	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	-	1000	-	mA
		1005		-	1000	-	
P_D	Power Dissipation	0603		-	-	150	mW
		1005		-	-	250	
T_{STG}	Storage temperature			-40	-	+125	ºC
T_j	Junction temperature			-40	-	+125	ºC

■ Electrical Characteristics (at T_A=25ºC unless otherwise noted)

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
V_F	Forward voltage	I_F=100mADC	-	-	0.44	V
I_R	Reverse current	V_R=30V	-	-	30	μA
C_T	Capacitance between terminals	F=1MHz, and 10 VDC reverse voltage	-	9	-	pF

■ Rating And Characteristic Curves

Fig. 1 - Forward characteristics

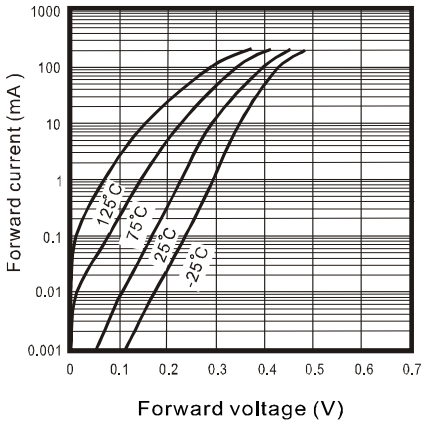


Fig. 2 - Reverse characteristics

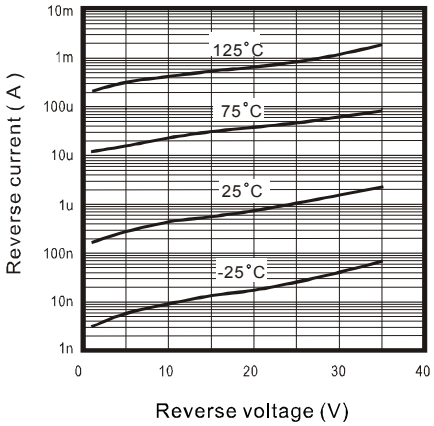


Fig. 3 - Capacitance between terminals characteristics

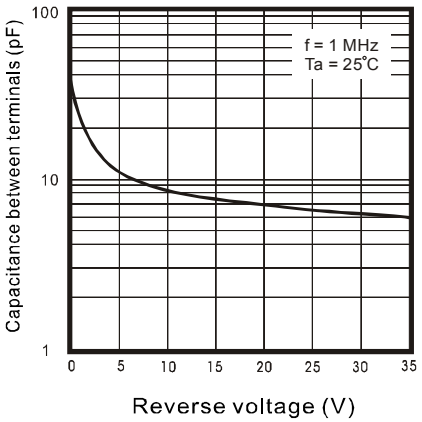
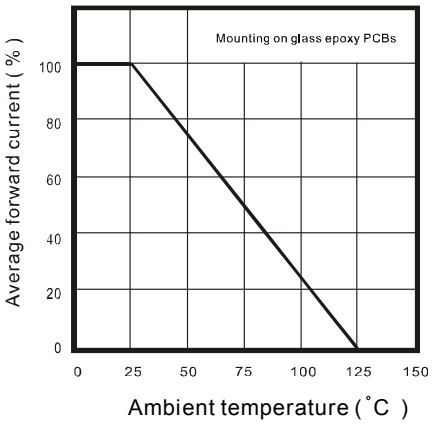


Fig. 4 - Current derating curve



■ Marking Information