

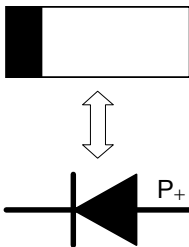
## SMD Switching Diode

### ■ Features

$$I_O = 100\text{mA}$$

$$V_R = 80\text{V}$$

- Designed for mounting on small surface.
- High speed switching.
- High mounting capability, strong surge withstand, high reliability.
- Extremely thin package.
- Lead-free device

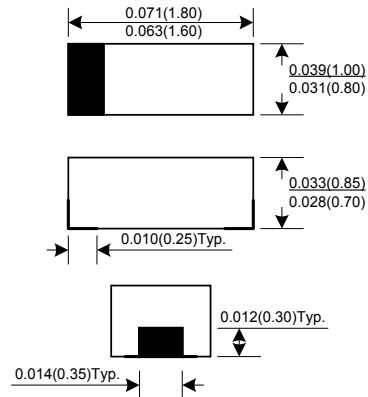


### ■ Mechanical Data

- 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)

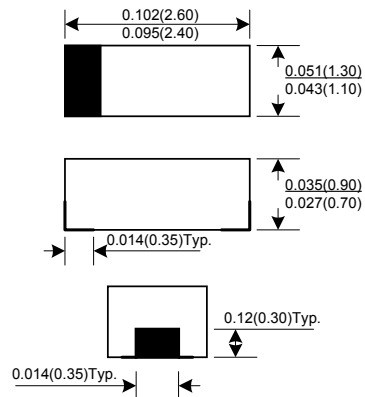
### ■ General Description

0603(1608)



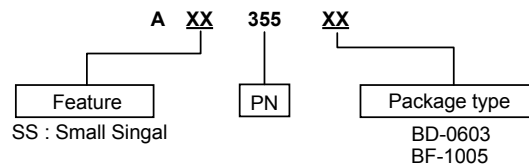
Dimensions in inches and (millimeter)

1005(2512)



Dimensions in inches and (millimeter)

### ■ Ordering information





■ **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		-	-	90	V	
$V_R$	Reverse voltage		-	-	80	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	-	-	300		
$I_{FRM}$	Repetitive peak forward current		-	-	225	mA	
$T_{STG}$	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	$I_F=100\text{mA DC}$	-	-	1.0	V
$I_R$	Reverse current	$V_R=80\text{V}$	-	-	0.1	$\mu\text{A}$
$C_T$	Capacitance between terminals	$F=1\text{MHz}$ , and 0.5 VDC reverse voltage	-	3	-	pF
$T_{rr}$	Reverse recovery time	$V_R=6\text{V}$ , $I_F=10\text{mA}$ , $R_L=50\text{ohms}$	-	4	-	nS

Rating And Characteristic Curves

Fig. 1 - Forward characteristics

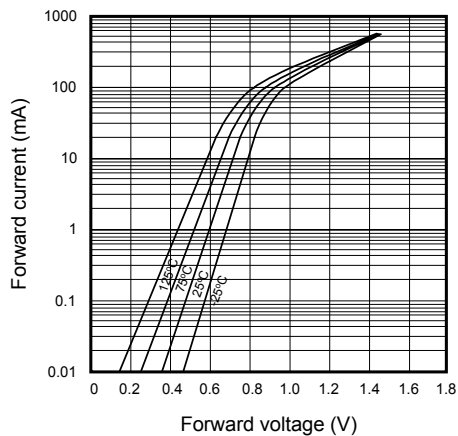


Fig. 2 - Reverse characteristics

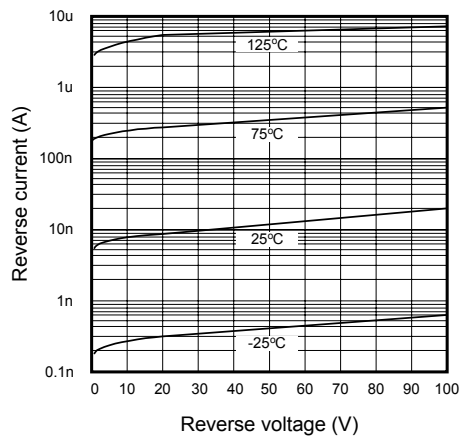


Fig. 3 - Capacitance between terminals characteristics

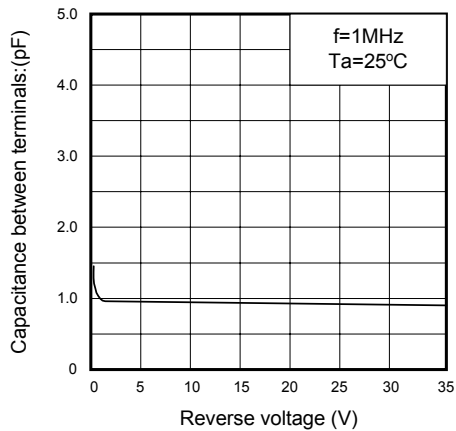
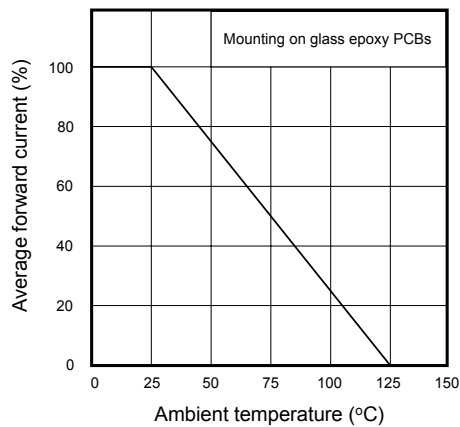


Fig. 4 - Current derating curve



Marking Information

