ASS4148

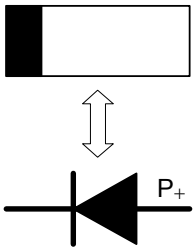
SMD Switching Diode

■ Features

$I_O = 150mA$

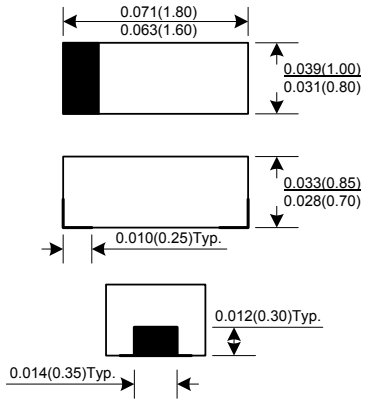
$V_R = 75V$

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



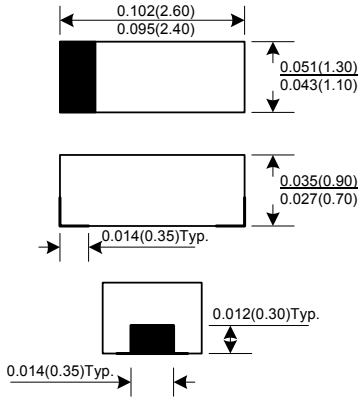
■ General Description

0603(1608)



Dimensions in inches and (millimeter)

1005(2512)

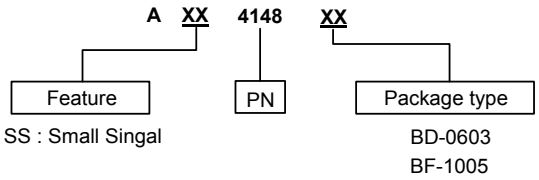


Dimensions in inches and (millimeter)

■ 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



This datasheet contains new product information. Anachip Corp. reserves the rights to modify the product specification without notice. No liability is assumed as a result of the use of this product. No rights under any patent accompany the sale of the product.

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

Symbol	Parameter		Conditions	Min	Typ	Max	Unit
V_{RRM}	Repetitive peak reverse voltage			-	-	100	V
V_R	Reverse voltage			-	-	75	V
I_O	Average forward current			-	-	150	mA
I_{FSM}	Forward current, surge peak	0603	T_P=1uS	-	4	-	A
			T_P=1mS		1		
		1005		-	4	-	
					1		
P_D	Power Dissipation	0603		-	-	150	mW
		1005		-	-	350	
I_{FRM}	Repetitive peak forward current			-	-	300	mA
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=50mADC	-	-	1.0	V
I_R	Reverse current	V_R=20V	-	-	25	nA
		V_R=75V			2.5	µA
C_T	Capacitance between terminals	F=1MHz, and 0 VDC reverse voltage	-	-	4.0	pF
T_{rr}	Reverse recovery time	I_R=I_F=10mA, R_L=100ohms,i_{rr}=1mA	-	-	4.0	nS

■ Rating And Characteristic Curves

Fig. 1 - Forward characteristics

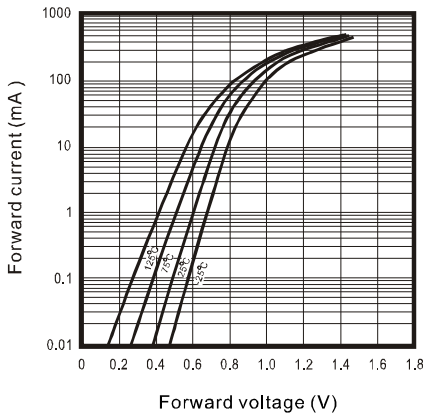


Fig. 2 - Reverse characteristics

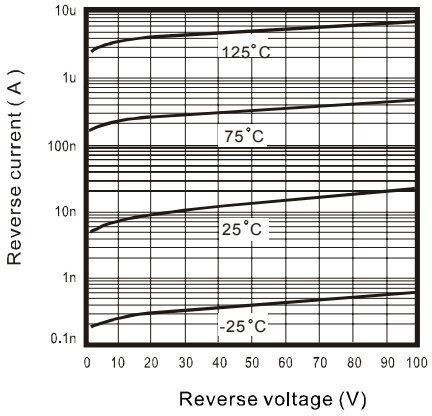


Fig. 3 - Capacitance between terminals characteristics

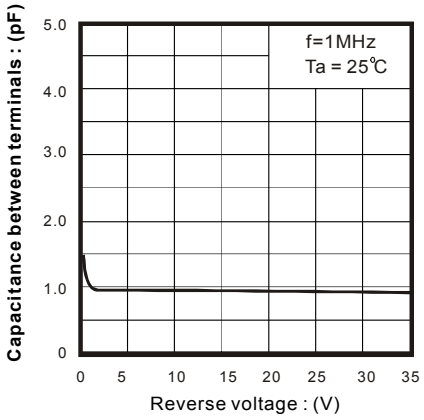
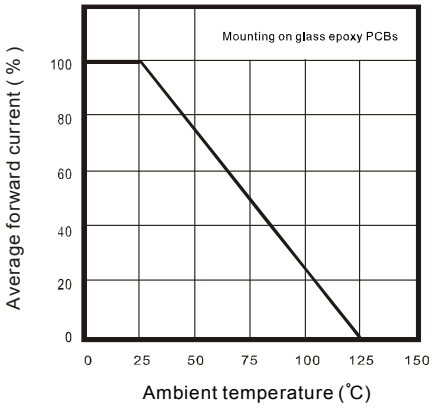
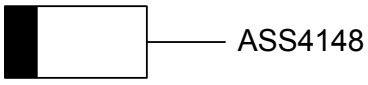


Fig. 4 - Current derating curve



■ Marking Information