



SMD Switching Diode

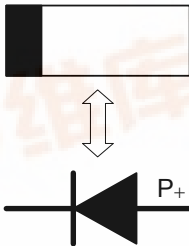
ASS4148

■ Features

$$I_O = 150\text{mA}$$

$$V_R = 75\text{V}$$

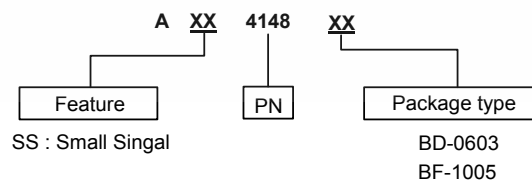
- Designed for mounting on small surface.
- High speed switching.
- High mounting capability, strong surge withstand, high reliability.
- Extremely thin package.
- Lead-free device



■ Mechanical Data

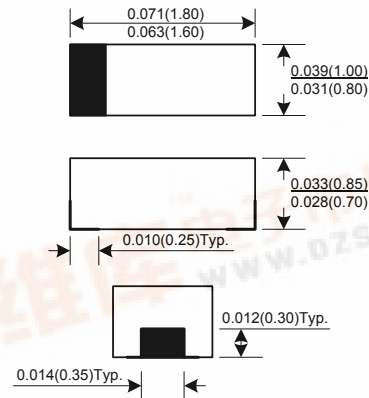
- Case :0603(1608) 1005(2512) standard package, molded plastic.
- Terminals : Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity : Indicated by cathode band.
- Mounting position : Any.
- Weight : BD:0.003gram (approximately)
BF:0.006gram (approximately)

■ Ordering information



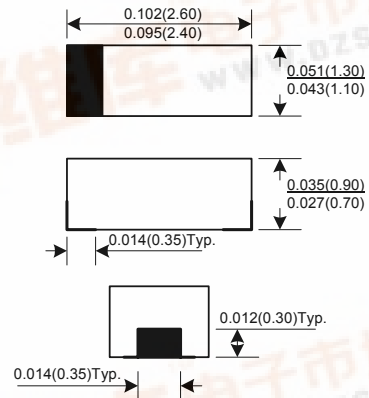
■ General Description

0603(1608)



Dimensions in inches and (millimeter)

1005(2512)



Dimensions in inches and (millimeter)



SMD Switching Diode

ASS4148

■ 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			-	-	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 T _P =1mS	-	4	-	A
		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	°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	$I_F=50\text{mA}$	-	-	1.0	V
I_R	Reverse current	$V_R=20\text{V}$	-	-	25	nA
		$V_R=75\text{V}$			2.5	μA
C_T	Capacitance between terminals	$F=1\text{MHz}$, and 0 VDC reverse voltage	-	-	4.0	pF
T_{rr}	Reverse recovery time	$I_R=I_F=10\text{mA}$, $R_L=100\Omega$, $i_{rr}=1\text{mA}$	-	-	4.0	nS

■ Rating And Characteristic Curves

Fig. 1 - Forward characteristics

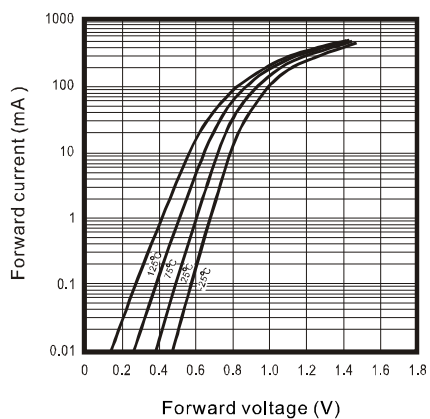


Fig. 2 - Reverse characteristics

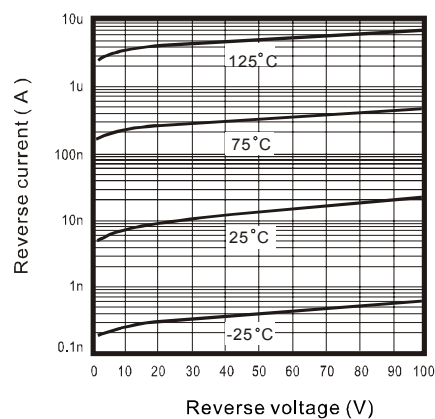


Fig. 3 - Capacitance between terminals characteristics

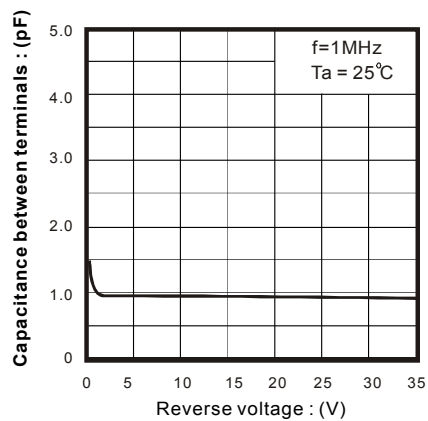
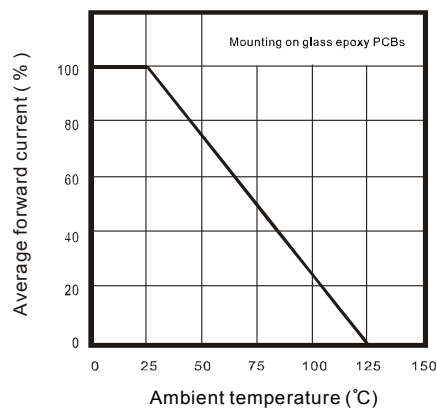


Fig. 4 - Current derating curve



■ Marking Information

