

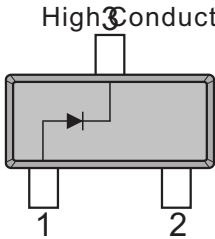


SOT-23

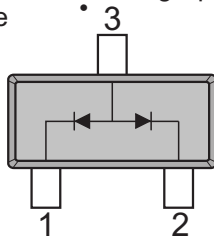
Switching Diodes

FEATURES

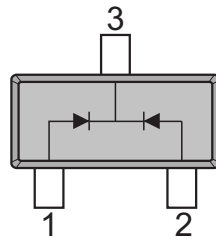
- Fast Switching Speed
- For General Purpose Switching Application
- High Conductance



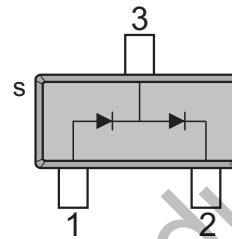
MMBD4148A



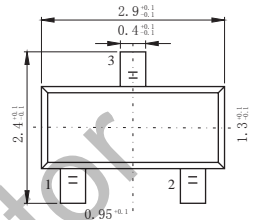
MMBD4148CA



MMBD4148CC



MMBD4148SE



Maximum Ratings @Ta=25°C

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}		
Working Peak Reverse Voltage	V_{RWM}	100	V
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	75	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_o	200	mA
Peak Forward Surge Current @t=1.0µs	I_{FSM}	2.0	A
@t=1.0s		1.0	
Power Dissipation	P_D	350	mW
Thermal Resistance Junction to Ambient	R_{thJA}	357	°C/W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

Electrical Characteristics @Ta = 25°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)1}$	$I_R=100\mu A$	100			V
	$V_{(BR)2}$	$I_R=5\mu A$	75			V
Forward voltage	V_F	$I_F=10mA$			1.0	V
Reverse current	I_{R1}	$V_R=75V$			5.0	µA
	I_{R2}	$V_R=25V$			25	nA
Capacitance between terminals	C_T	$V_R=0V, f=1MHz$			4.0	pF
Reverse recovery time	t_{rr}	$I_F=I_R=10mA, V_R=6V$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$			4.0	ns

Fig.1 Power Derating Curve

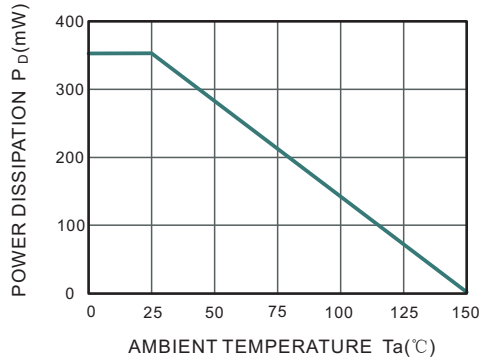


Fig.2 Reverse Characteristics

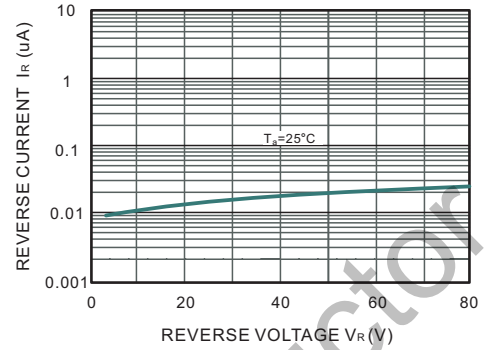


Fig.3 Forward Characteristics

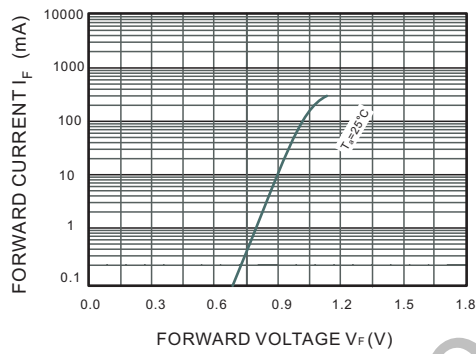


Fig.4 Capacitance Characteristics

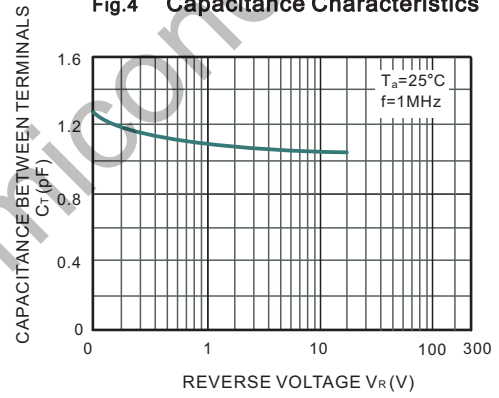
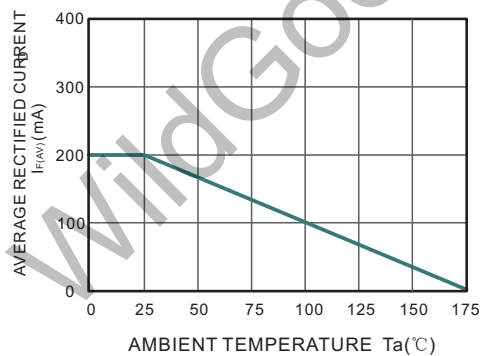
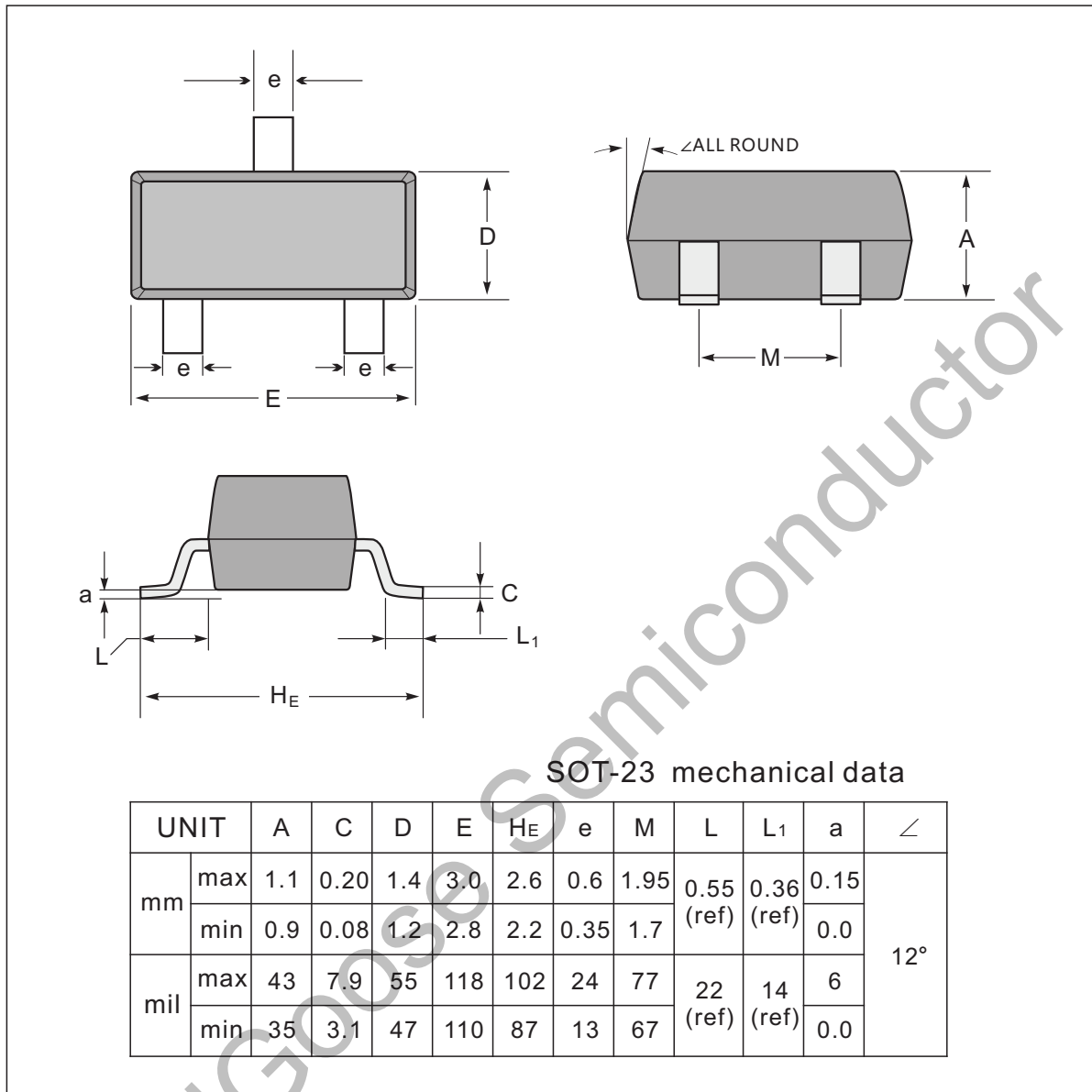


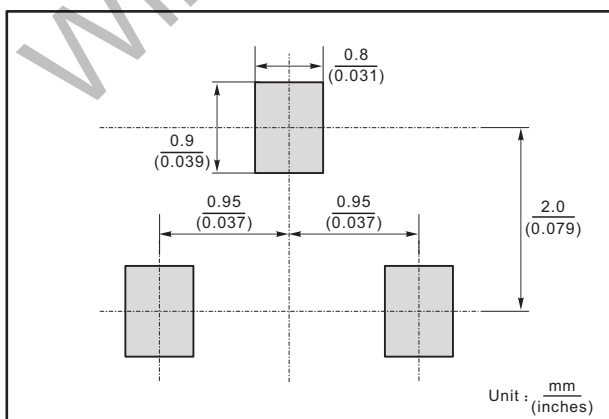
Fig.5 Semiconductor Intrinsic Property



SOT-23 Package Outline Dimensions



The recommended mounting pad size



Marking

Type number	Marking code
MMBD4148A	5H
MMBD4148CA	D6
MMBD4148CC	D5
MMBD4148SE	D4