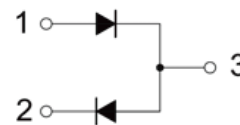


Features

- Dual Switching Diode
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications



SOT23



Equivalent Circuit

Absolute Maximum Ratings($T_A=25^{\circ}\text{C}$)

Symbol	Parameter	Value	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V_{RRM}	Peak Repetitive Peak Reverse Voltage	75	V
V_{RWM}	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	53	V
I_O	Average Rectified Output Current	200	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	2.0	A
P_D	Power Dissipation	225	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	556	$^{\circ}\text{C}/\text{W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

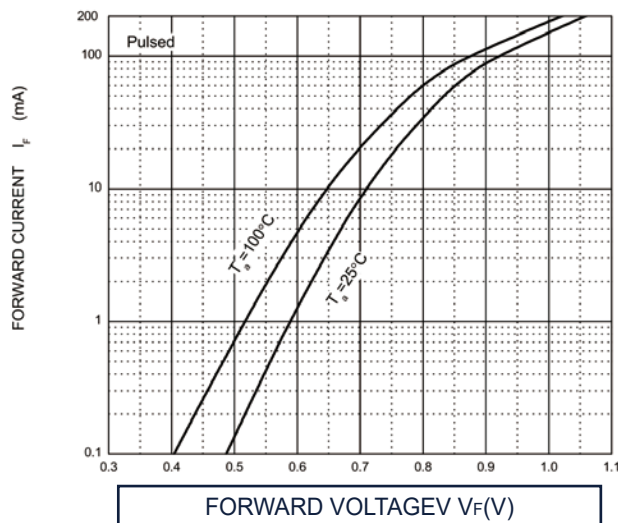
Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse breakdown voltage	$I_R=100\mu\text{A}$	100			V
I_R	Reverse current	$V_R=50\text{V}$			1.0	μA
		$V_R=100\text{V}$			3.0	
V_F	Forward voltage	$I_F=1\text{mA}$	0.55		0.7	V
		$I_F=10\text{mA}$	0.67		0.82	
		$I_F=100\text{mA}$	0.75		1.1	
C_T	Capacitance between terminals	$V_R=0\text{V}, f=1\text{MHz}$			2	pF
t_{rr}	Reverse recovery time	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \times I_R, R_L=100\Omega$			4	nS

Ordering information

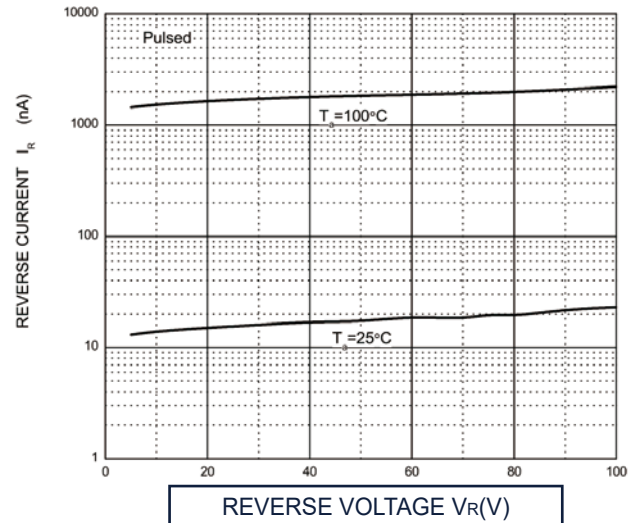
Product ID	Marking	Naming rule	Pack	Qty(PCS)
MMBD7000	M5C	MMBD7000 产品名称 product name	SOT23	3000

Typical Characteristics

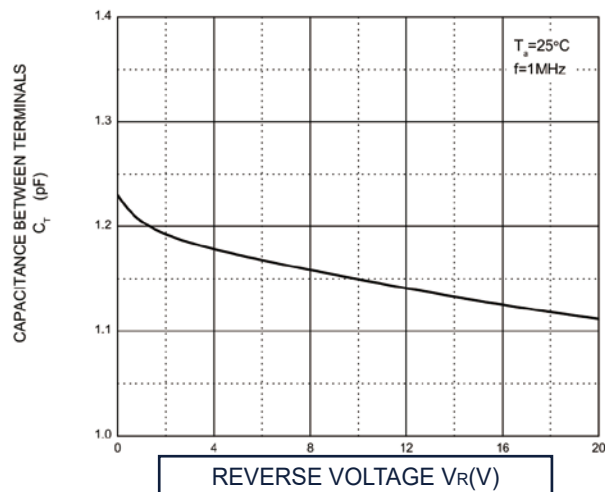
Forward Characteristics



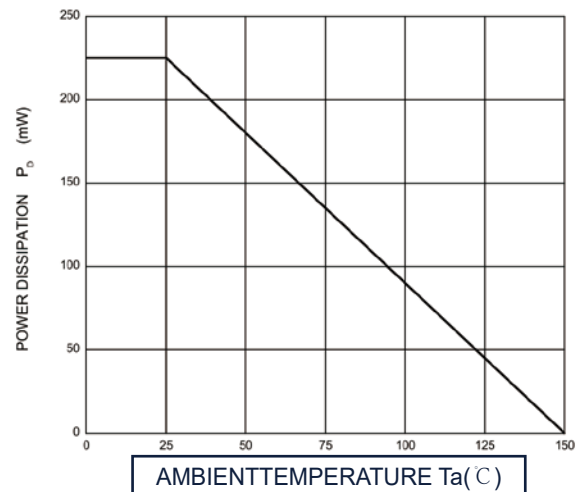
Reverse Characteristics



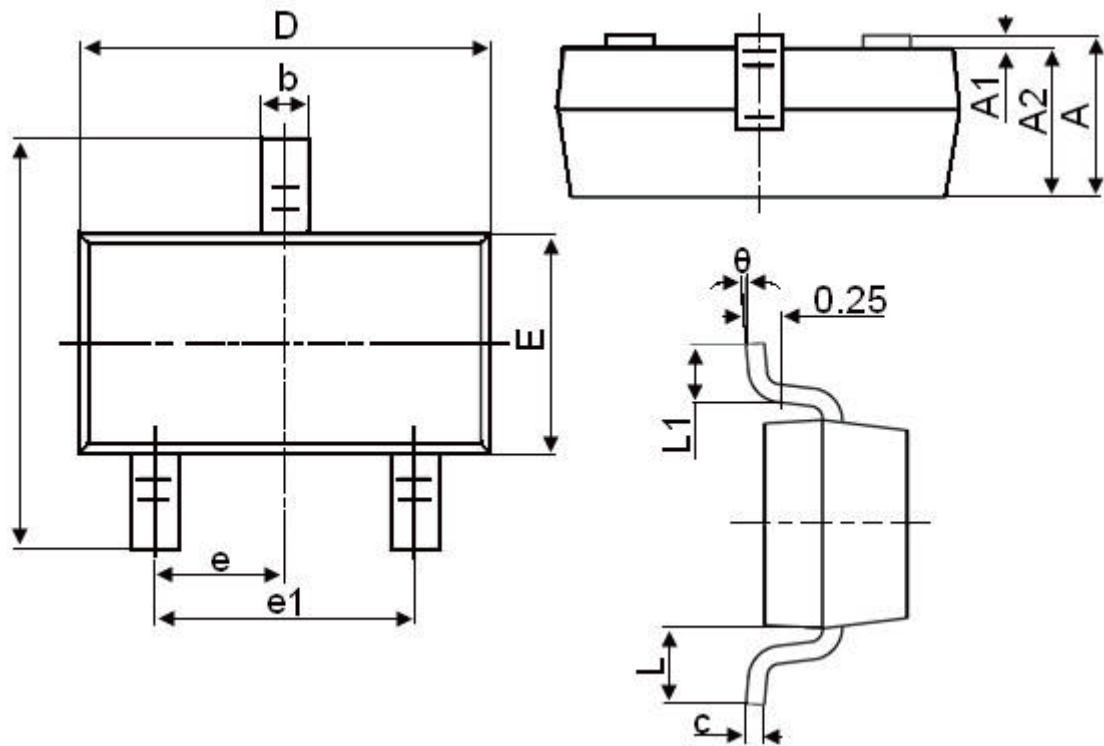
Capacitance Characteristics



Power Derating Curve



SOT23 Package Outline Dimensions



Symbol	Dimensions in Millimeters	
	mm	
	Min	Max
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°