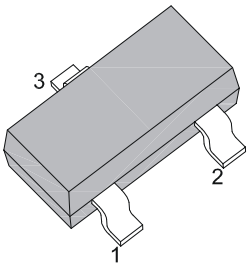
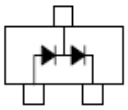
Dual Small Signal Switching Diode



SOT-23



Features

- Silicon Epitaxial Planar Diode
- Fast Switching Dual Diode. Especially Suited for Automatic Insertion
- High Conductance
- Electrically Identical to Standard JEDEC
- RoHS Compliant

Mechanical Data

Case:	SOT-23, Plastic Case
Terminals:	Solderable per MIL-STD-202G, Method 208
Weight:	Approx. 0.0088 gram

Maximum Ratings *($T_{Ambient}$=25ºC unless noted otherwise)*

Symbol	Description	MMBD7000	Unit	Conditions
	Marking Code	T3		
V_{RM}	Reverse Voltage	100	V	
V_{RRM}	Peak Reverse Voltage	100	V	
$I_{F(AV)}$	Forward Average Current	200	mA	
I_{FSM}	Peak Forward Surge Current, Pulse Width=1s	500	mA	
P_D	Power Dissipation on FR-5 Board	225	mW	T_A=25° C
		1.8	mW/° C	Derate above 25° C
	Total Device Dissipation on Alumina Substrate	300	mW	T_A=25° C
		2.4	mW/° C	Derate above 25° C
R_{thJA}	Typical Thermal Resistance	417	° C/W	Note1
R_{thJA}	Junction to Ambient Air	556	° C/W	Note2
T_J	Maximum Junction Temperature	150	° C	
T_S	Storage Temperature Range	-55 to +150	° C	

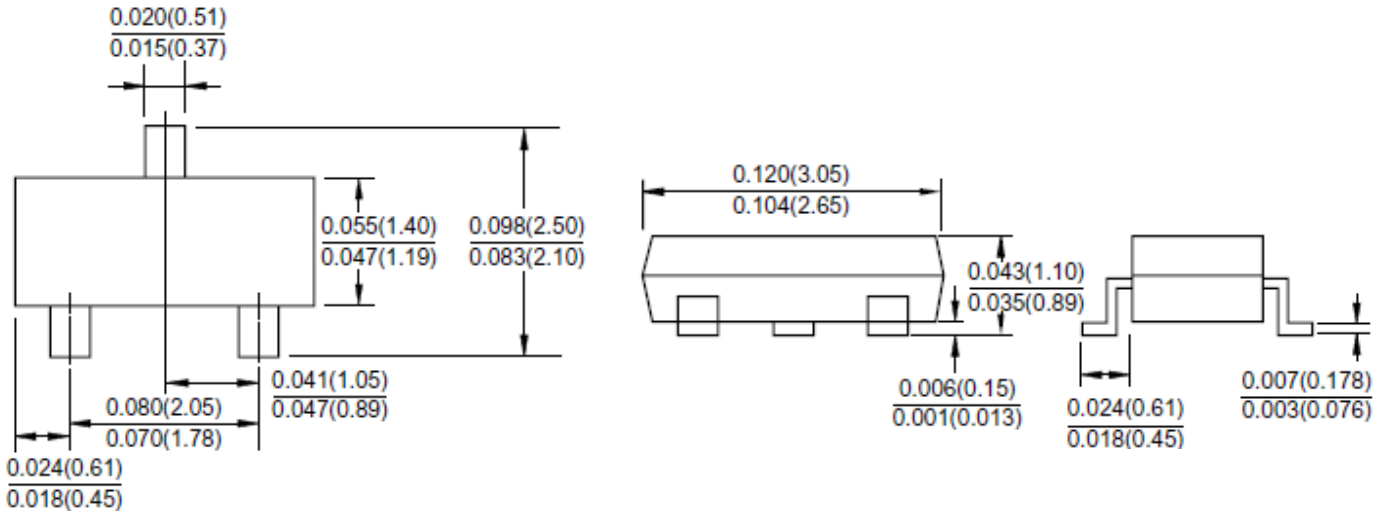
Note: 1) Device on alumina substrate
2) On FR-5 board

Electrical Characteristics *(T Ambient=25ºC unless noted otherwise)*

Symbol	Description	Min.	Max.	Unit	Conditions
V_{BR}	Reverse Breakdown Voltage	100	-	V	I_R=100μA
I_R	Leakage Current	-	1.0	μA	V_R=50V
		-	3.0		V_R=100V
		-	100		V_R=50V, T_j=125° C
V_F	Forward Voltage	0.55	0.70	V	IF=1mA
		0.67	0.82		IF=10mA
		0.75	1.10		IF=100mA
C_D	Diode Capacitance	-	1.5	pF	V_R=0V, f=1MHz
T_{rr}	Reverse Recovery Time	-	4.0	nS	I_F=10mA , I_R=10mA, I_{rr}=1mA , R_L=100Ω

Dimensions in inch (mm)

SOT-23



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