

Two Terminals SMD Switching Diodes

Features

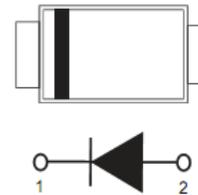
- Very fast reverse recovery ($t_{rr} < 2.0$ ns typical)
- Low capacitance (< 2.5 pF @ 0V)
- Surface mount package, suitable for automatic insertion
- RoHS compliant



SOD-323F

Mechanical Data

Case:	SOD-323, Plastic Case
Terminals:	Solderable per MIL-STD-750, Method 2026
Weight:	0.00014 ounces, 0.0041 gram
Polarity	Color band cathode



Absolute Ratings ($T_{Ambient} = 25^{\circ}C$ unless noted otherwise)

Symbol	Description	MMBD6050WS	Unit	Conditions
	Marking Code	T2		
V_{RM}	Reverse Voltage	80	V	
V_{RRM}	Peak Reverse Voltage	80	V	
I_{F(AV)}	Average Forward Current	200	mA	
I_{FSM}	Peak Forward Surge Current	4	A	PW=1.0us
P_D	Power Dissipation	200	mW	above 25°C
T_J	Operating Junction	-55 to +150	°C	
T_{STG}	Storage Temperature Range	-55 to +150	°C	
R_{θJA}	Thermal Resistance	625	°C/W	

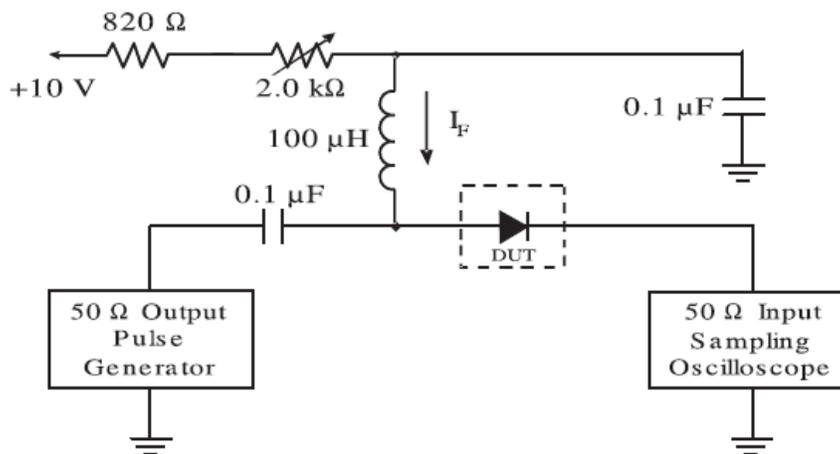
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MMBD6050WS

Electrical Characteristics ($T_{Ambient}=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	MIN.	TYP.	MAX	Unit	Conditions
V_{BR}	Reverse Breakdown Voltage	80	-	-	V	$I_R=100\mu\text{A}$
V_F	Max Forward Voltage	0.55	-	0.70	V	$I_F=1\text{mA}$
		0.85	-	1.10		$I_F=100\text{mA}$
I_R	Max. Reverse Current	-	-	100	nA	$V_R=50\text{V}$
C_T	Total Capacitance	-	-	2.5	pF	$V_R=0\text{V}$, $f=1\text{MHz}$
T_{rr}	Reverse Recovery Time	-	-	4	ns	$I_F=I_R=10\text{mA}$, $R_L=100\Omega$

Reverse Recovery Time Equivalent Test Circuit



- Notes:
1. A 2.0kΩ variable resistor adjusted for a forward current (I_F) to 10mA
 2. Input pulse is adjusted to $I_{R(\text{peak})}$ is equal to 10mA

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Typical Characteristics Curves

Fig.1- Reverse Current vs. Reverse Voltage

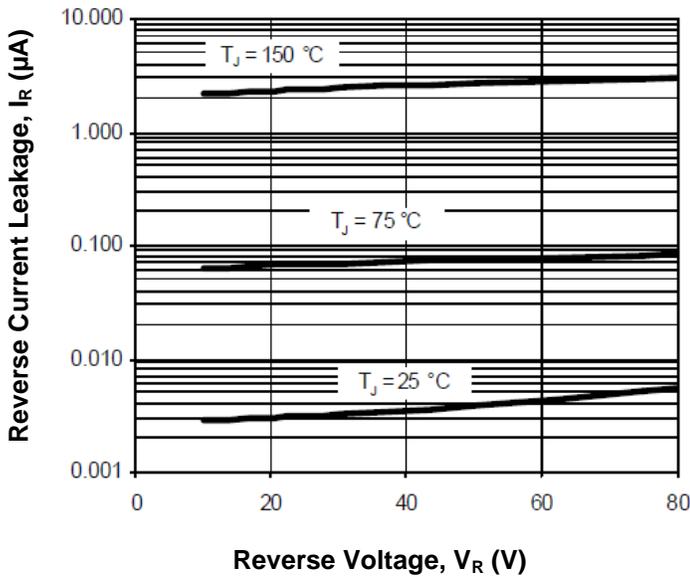


Fig.2- Forward Current vs. Forward Voltage

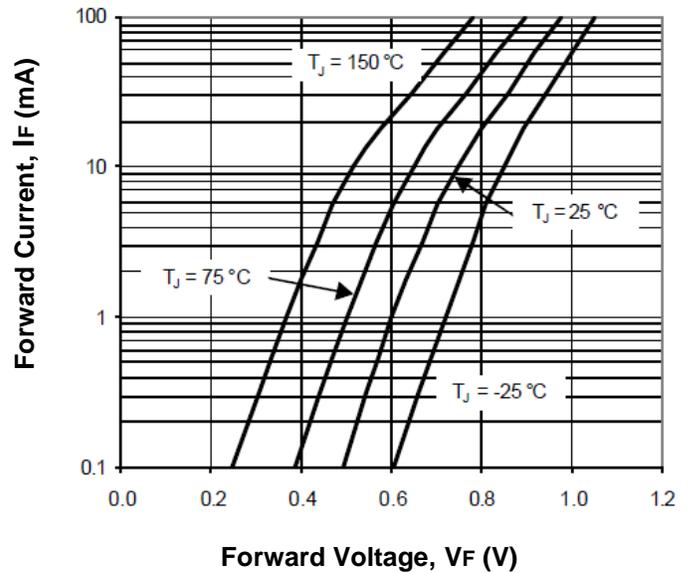
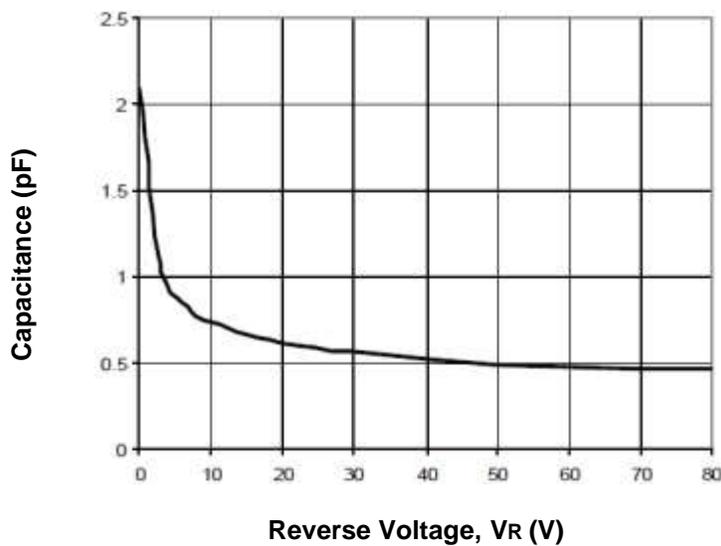


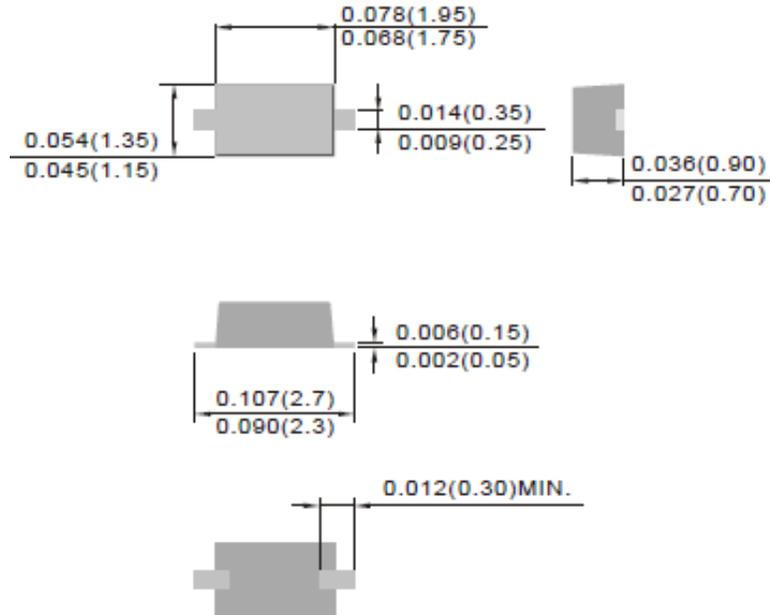
Fig.3- Capacitance vs. Reverse Voltage



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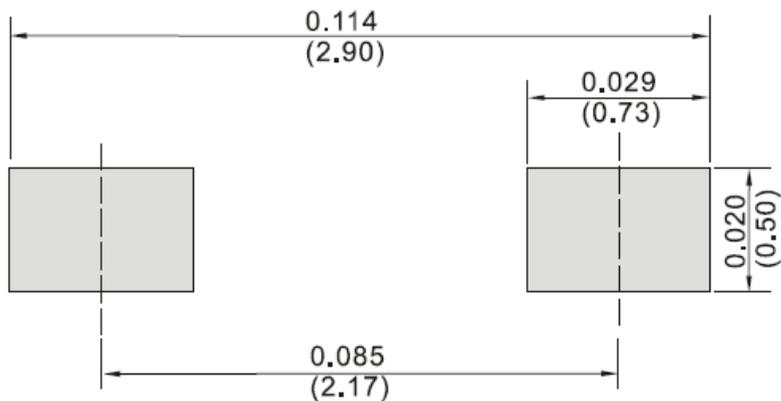
MMBD6050WS

Dimensions in inch(mm)



SOD-323F

Mount Pad Layout



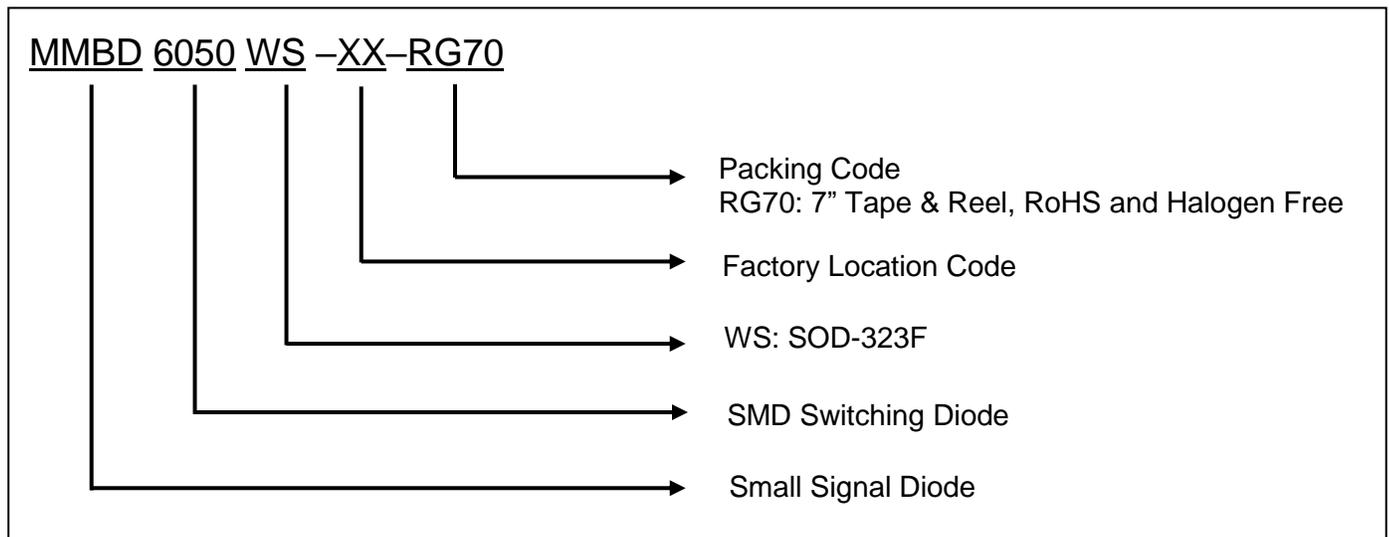
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MMBD6050WS

Packing Information:

Tape and Reel --- 5K per 7" plastic reel

How to Order



How to contact us

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