

## Surface mount switching diode

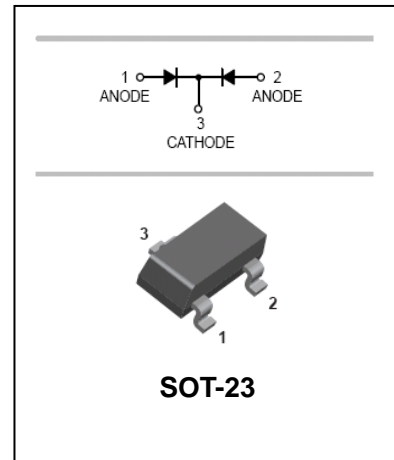
## MMBD6050

### FEATURES

- High conductance.
- Fast switching.
- Surface mount package ideally suited for automatic insertion.



Lead-free



**SOT-23**

### APPLICATIONS

- For general purpose and switching application.

### ORDERING INFORMATION

Type No.	Marking	Package Code
MMBD6050	5A●	SOT-23

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Limits	Unit
Continuous Reverse Voltage	$V_R$	70	V
Forward current	$I_F$	200	mA
Peak surge forward Current	$I_{FSM}$	500	A
Power Dissipation	$P_d$	225	mW
Thermal resistance , Junction-to-Ambient	$R_{\theta JA}$	417	°C/W
Operating Junction Temperature Range	$T_j$	150	°C
Storage Temperature Range	$T_{STG}$	-55 to +150	°C

### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	MAX	UNIT	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	70		V	$I_R = 100\mu A$
Forward Voltage	$V_F$	0.55 0.85	0.7 1.1	V	$I_F = 1mA$ $I_F = 100mA$
Reverse Leakage Current	$I_R$		0.1	$\mu A$	$V_R = 50V$
Total Capacitance	$C_{tot}$		2.5	pF	$V_R = 0V, f = 1MHz$
Reverse Recovery Time	$t_{rr}$		4	ns	$I_F = I_R = 10mA, I_{tr} = 1mA$

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TYPICAL CHARACTERISTICS @  $T_a=25^\circ\text{C}$  unless otherwise specified

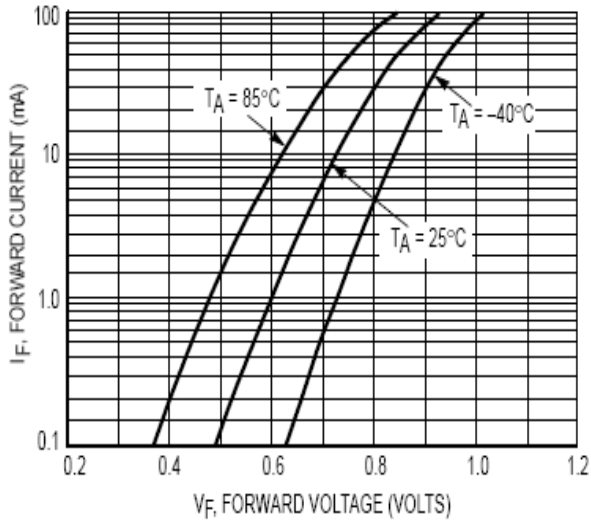


Figure 2. Forward Voltage

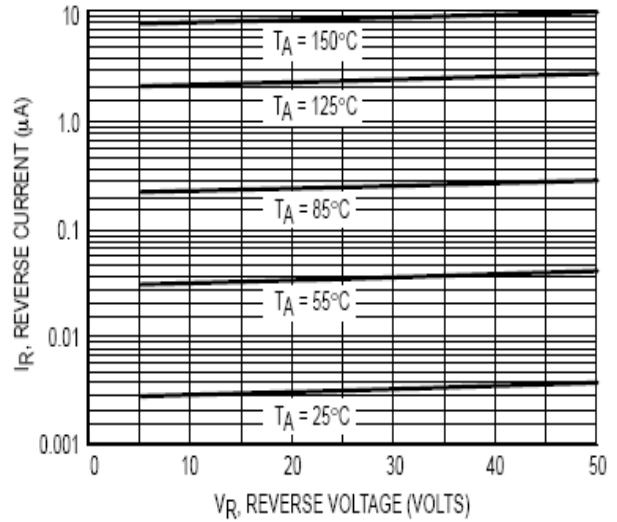


Figure 3. Leakage Current

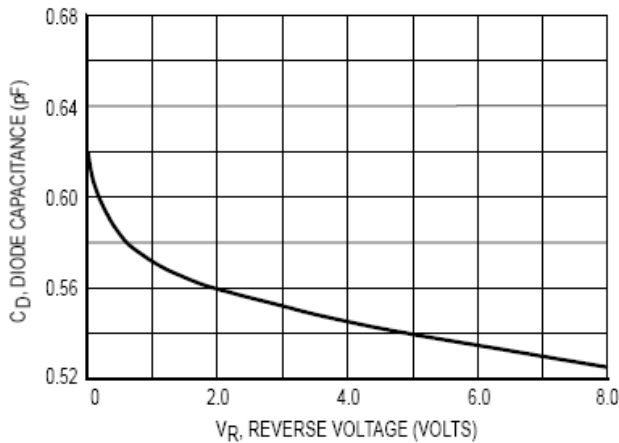


Figure 4. Capacitance

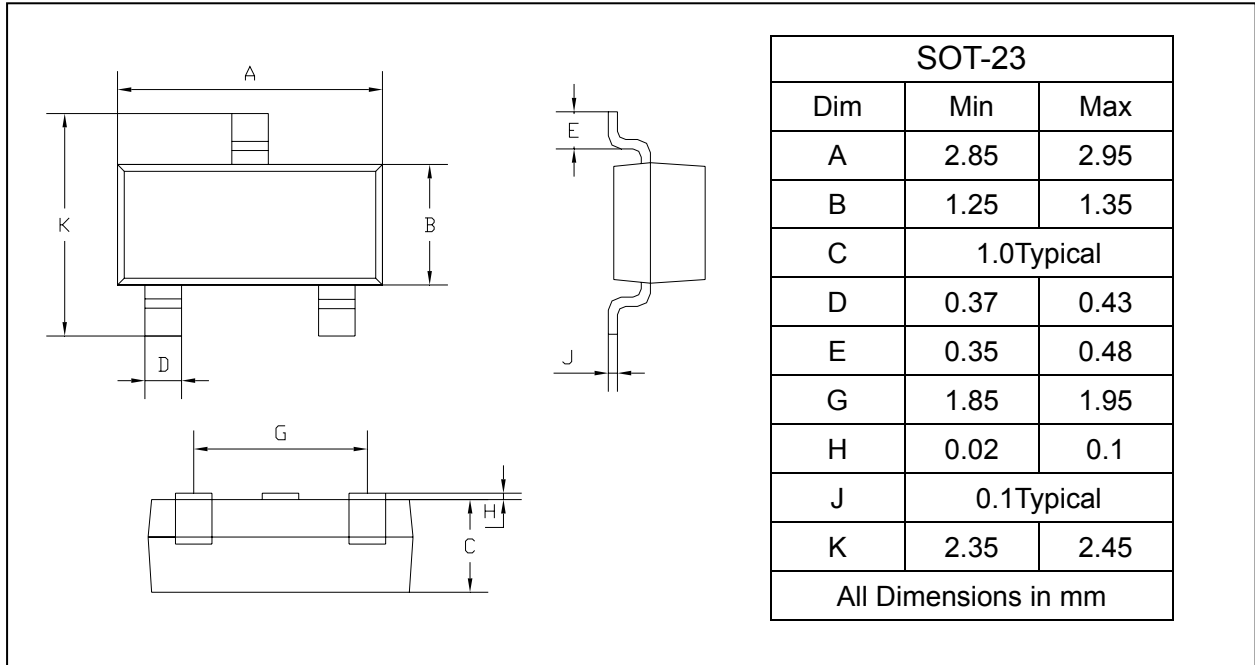
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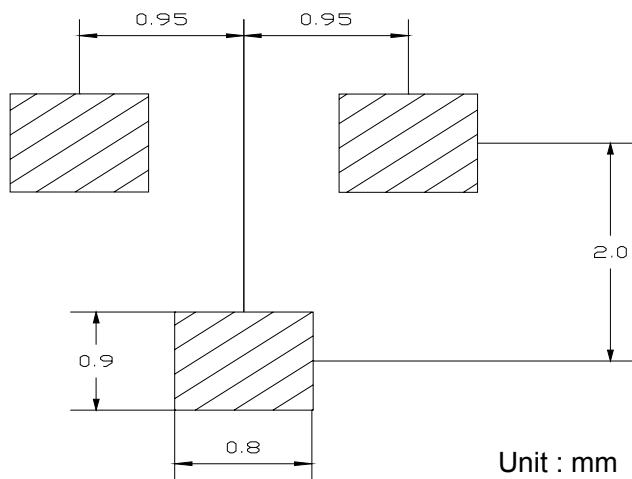
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
MMBD6050	SOT-23	3000/Tape&Reel

[www.s-manuals.com](http://www.s-manuals.com)