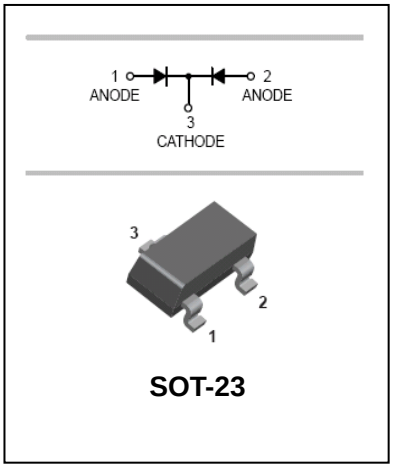
Surface mount switching diode **MMBD6050**

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℃ unless otherwise specified

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

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Characteristic	**Symbol**	**Min**	**MAX**	**UNIT**	**Test Condition**
Reverse Breakdown Voltage	$V_{(BR)R}$	70		V	I_R= 100μA
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	μA	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_{rr}=1mA

Surface mount switching diode **MMBD6050**

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

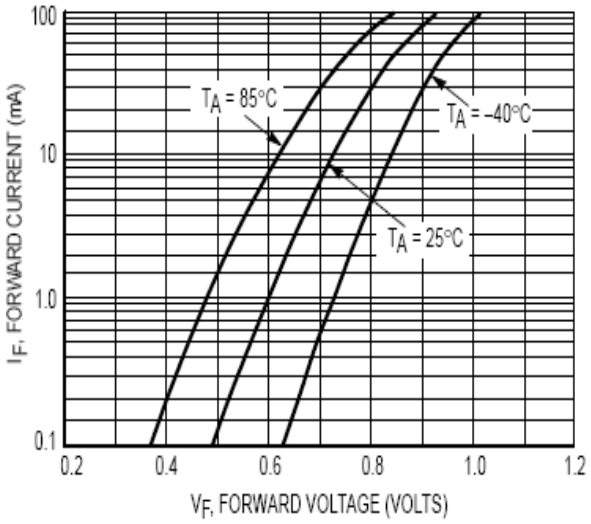


Figure 2. Forward Voltage

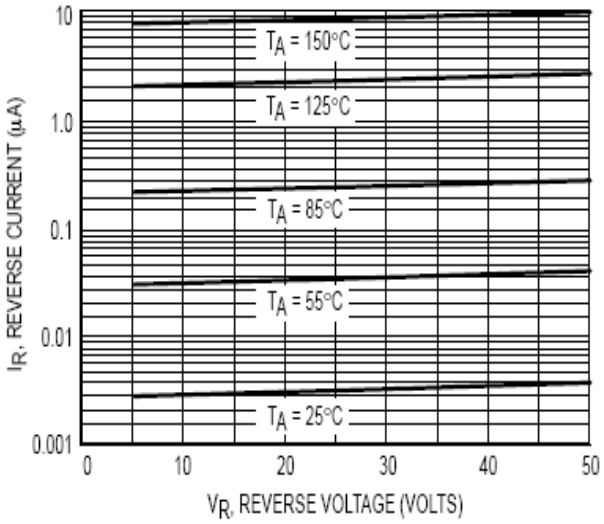


Figure 3. Leakage Current

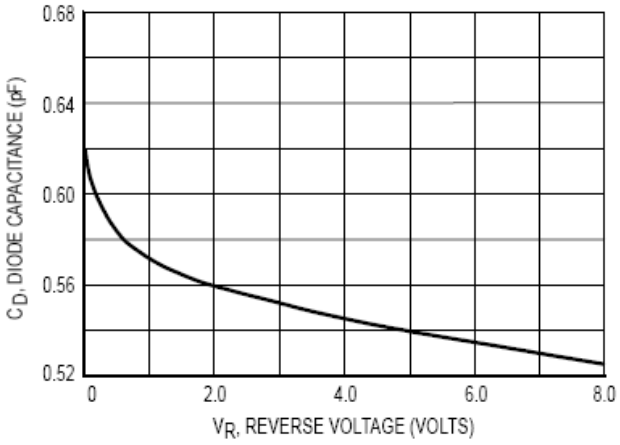
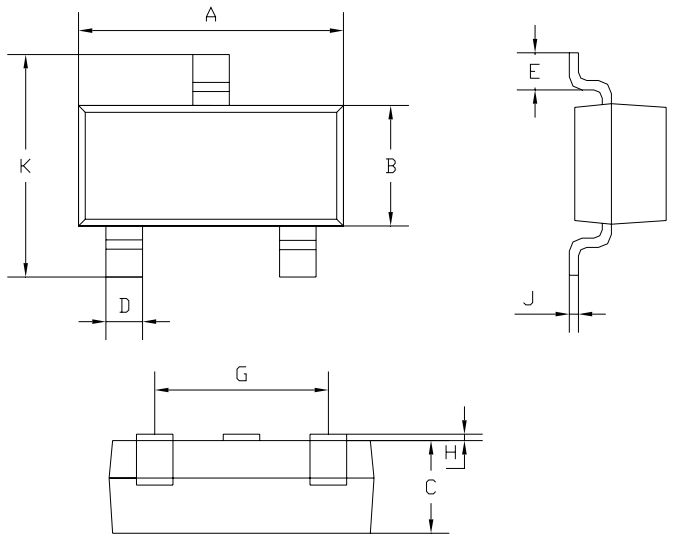


Figure 4. Capacitance

Surface mount switching diode **MMBD6050**

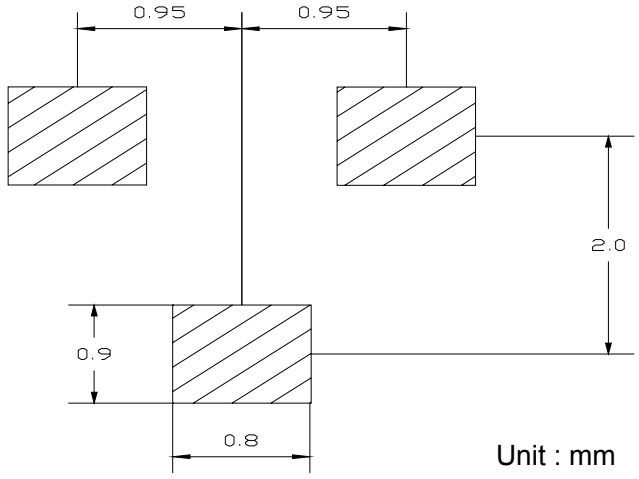
PACKAGE OUTLINE

Plastic surface mounted package SOT-23



SOT-23		
Dim	Min	Max
A	2.85	2.95
B	1.25	1.35
C	1.0Typical	
D	0.37	0.43
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1Typical	
K	2.35	2.45
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

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