

## Dual Hot Carrier Mixer Diodes

## MMBD352/353/354/355

### FEATURES

- Very low capacitance—  
Less than 1.0pF@zero V.
- Low forward voltage— $I_F=10\text{mA}$ .
- Power dissipation  $P_d=300\text{mW}$
- Pb-Free package is available.

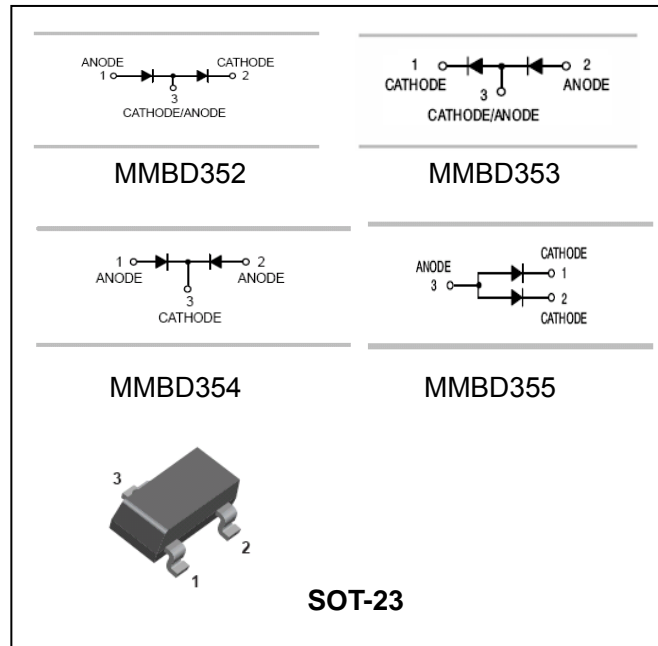


Lead-free

### APPLICATIONS

- Designed primarily for UHF mixer applications.

### ORDERING INFORMATION



Type No.	Marking	Package Code
MMBD352	M5G	SOT-23
MMBD353	M4F	SOT-23
MMBD354	M6H	SOT-23
MMBD355	MJ1	SOT-23

### MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Limits	Unit
Continuous reverse voltage	$V_R$	7.0	V
Power Dissipation	$P_d$	300	mW
Thermal Resistance, Junction-to-Ambient	$R_{\theta JA}$	417	$^\circ\text{C/W}$
Junction and storage temperature	$T_J, T_{STG}$	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)}$	7.0			V	$I_R=100\mu\text{A}$
Forward voltage	$V_F$			0.60	V	$I_F=10\text{mA}$
Reverse current	$I_R$			0.25 10	$\mu\text{A}$	$V_R=3.0\text{V}$ $V_R=7.0\text{V}$
Diode Capacitance	$C_D$		1.0		pF	$V_R=0\text{V}, f=1\text{MHz}$

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

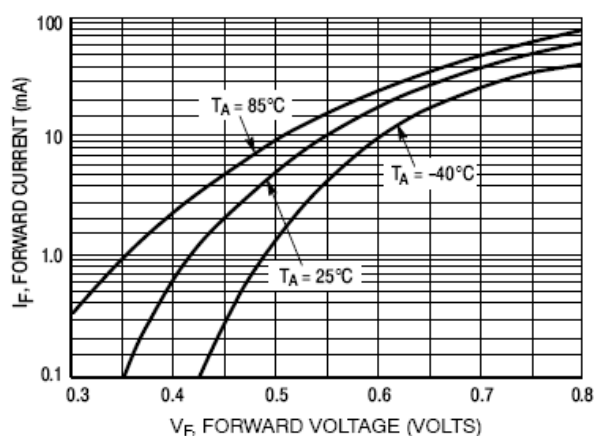


Figure 1. Forward Voltage

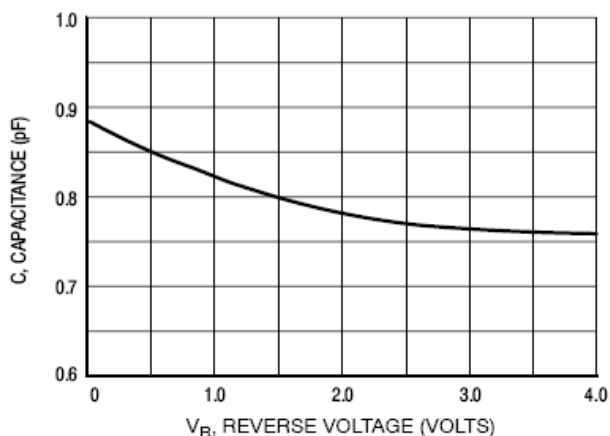


Figure 2. Capacitance

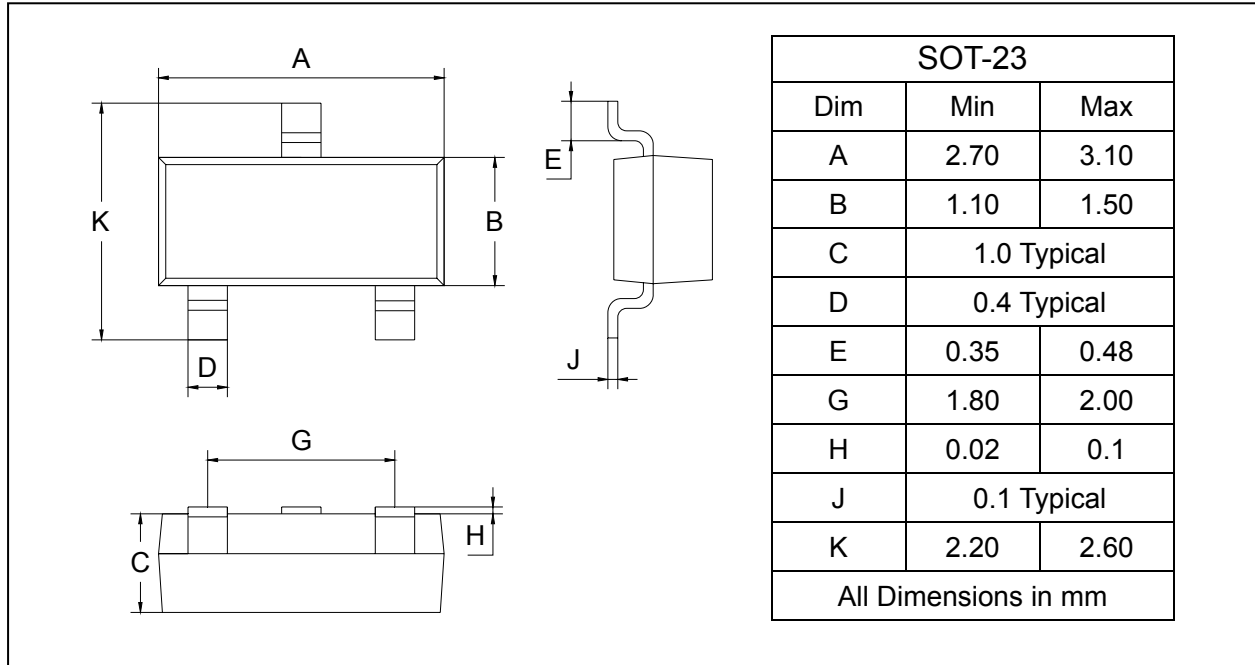
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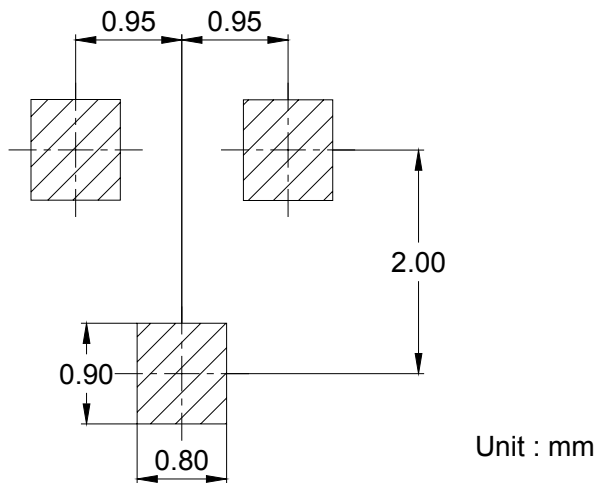
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
MMBD352/353/354/355	SOT-23	3000/Tape&Reel