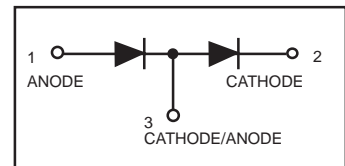
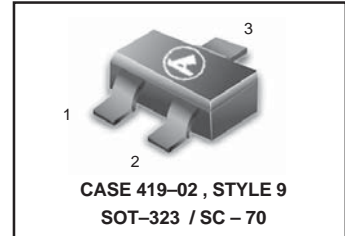


# Dual Schottky Barrier Diode

## MMBD352WT1

These devices are designed primarily for UHF mixer applications but are suitable also for use in detector and ultra-fast switching circuits.

- Very Low Capacitance — Less Than 1.0 pF @ Zero Volts
- Low Forward Voltage — 0.5 Volts (Typ) @  $I_F = 10$  mA



### MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Continuous Reverse Voltage	$V_R$	7.0	$V_{CC}$

### THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board <sup>(1)</sup> $T_A = 25^\circ\text{C}$ Derate above $25^\circ\text{C}$	$P_D$	200	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Total Device Dissipation Alumina Substrate <sup>(2)</sup> $T_A = 25^\circ\text{C}$ Derate above $25^\circ\text{C}$	$P_D$	300	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	417	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature	$T_J, T_{stg}$	-55 to +150	$^\circ\text{C}$

### DEVICE MARKING

MMBD352WT1 = M5
-----------------

### ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

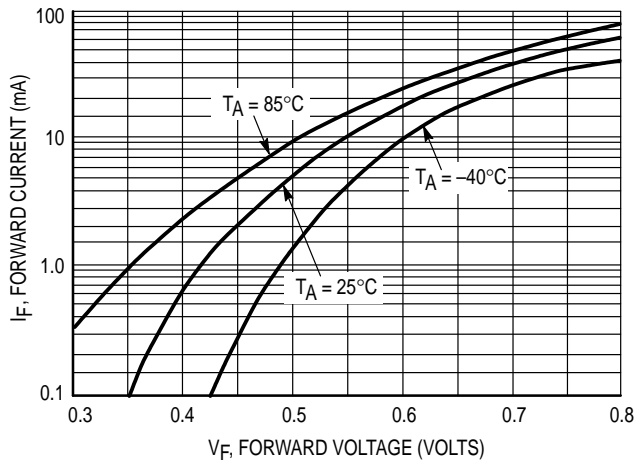
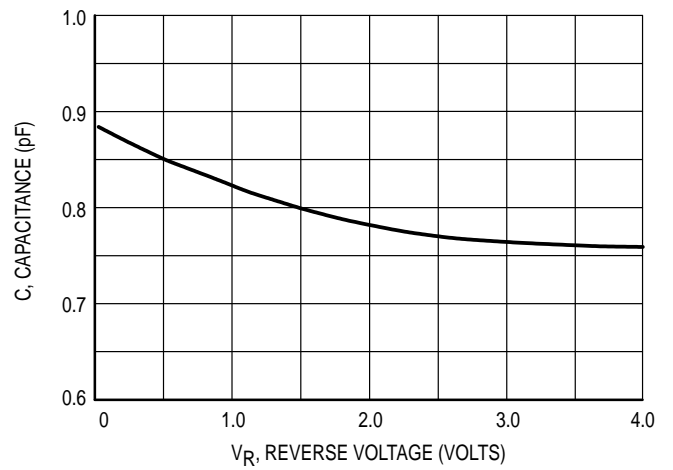
Characteristic	Symbol	Min	Max	Unit
----------------	--------	-----	-----	------

### OFF CHARACTERISTICS

Forward Voltage ( $I_F = 10$ mAdc)	$V_F$	—	0.60	V
Reverse Voltage Leakage Current ( $V_R = 3.0$ V)	$I_R$	—	0.25	$\mu\text{A}$
( $V_R = 7.0$ V)		—	10	
Capacitance ( $V_R = 0$ V, $f = 1.0$ MHz)	C	—	1.0	pF

1. FR-5 =  $1.0 \times 0.75 \times 0.062$  in.

2. Alumina =  $0.4 \times 0.3 \times 0.024$  in. 99.5% alumina.

**MMBD352WT1**
**TYPICAL CHARACTERISTICS**

**Figure 1. Forward Voltage**

**Figure 2. Capacitance**