



# DATA SHEET

## MMBD717W/AW/CW/SW

### COMMON ANODE SCHOTTKY BARRIER DIODES

**VOLTAGE** 20 Volts

**CURRENT** 0.2 Amperes

**SOT-323**

Unit: inch (mm)

#### FEATURES

These Schottky barrier diodes are designed for high speed switching applications, circuit protection, and voltage clamping.

Extremely low forward voltage reduces conduction loss.

Miniature surface mount package is excellent for hand held and portable applications where space is limited.

Both normal and Pb free product are available :

Normal : 80~95% Sn, 5~20% Pb

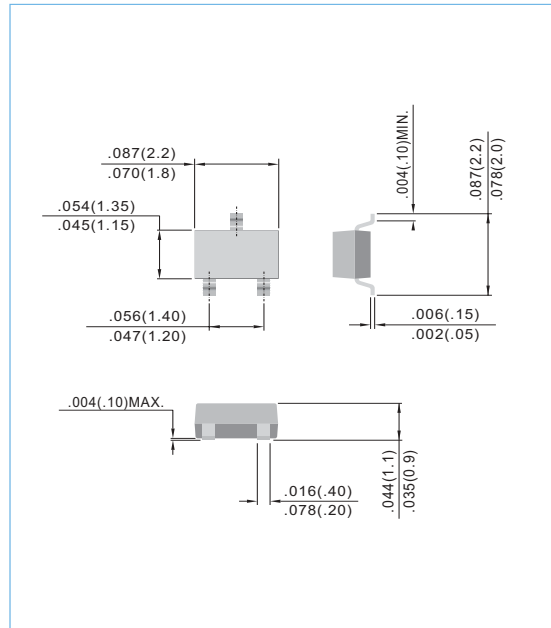
Pb free: 99% Sn above can meet Rohs environment substance directive request

#### MECHANICAL DATA

Case: SOT-323, Plastic

Terminals: Solderable per MIL-STD-202G, Method 208

Approx. Weight: 4.8mg



#### MAXIMUM RATINGS (T<sub>J</sub> = 125 °C unless otherwise noted)

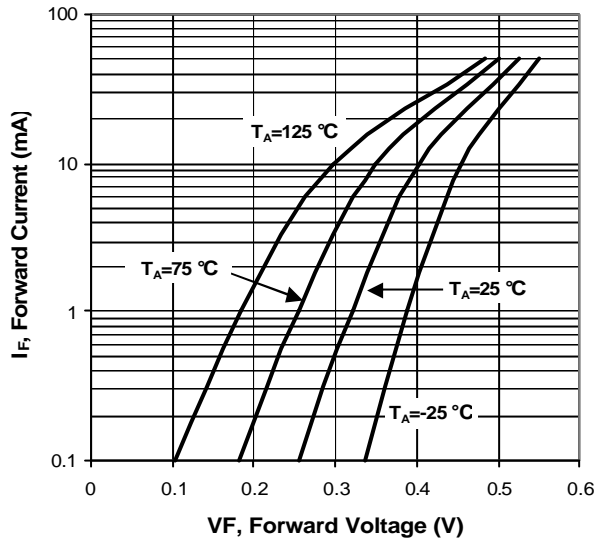
RATING	SYMBOL	VALUE	UNIT
Reverse Voltage	V <sub>R</sub>	20	Volts
Forward Power Dissipation @ T <sub>A</sub> = 25°C	P <sub>F</sub>	200	mW
Derate above 25°C		1.6	mW/°C
Operating Junction Temperature Range	T <sub>J</sub>	-50 to 150	°C
Storage Temperature Range	T <sub>STG</sub>	-50 to 150	°C

#### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C, unless otherwise noted)

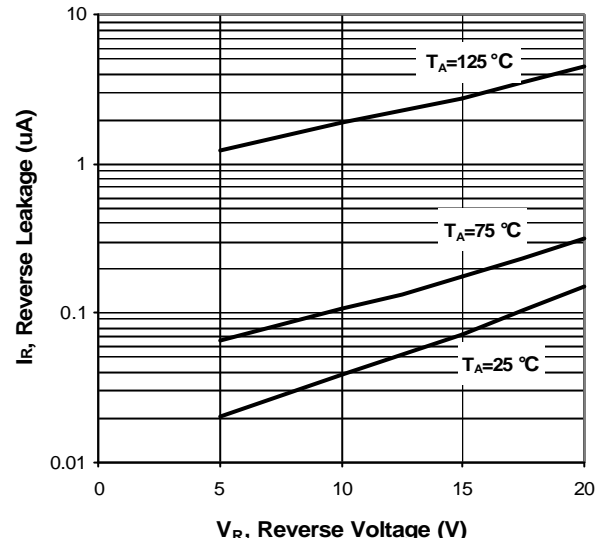
TYPE		MMBD717W	MMBD717AW	MMBD717CW	MMBD717SW
PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT
Reverse Breakdown Voltage (I <sub>R</sub> =10u A)	V <sub>(BR)R</sub>	70	-	-	V
Total Capacitance (V <sub>R</sub> =1.0V,f=1.0MHz)	C <sub>T</sub>	-	-	0.2	uA
Reverse Leakage (V <sub>R</sub> =10V) (For each individual diode while the second diode is unbiased)	I <sub>R</sub>	-	-	0.5 1.0	V
Forward Voltage (I <sub>F</sub> =1.0 m Adc)	V <sub>F</sub>	-	-	1.0	Pf
Circuit Figure		SINGLE	COMMONANODE	COMMONCATHODE	SERIES



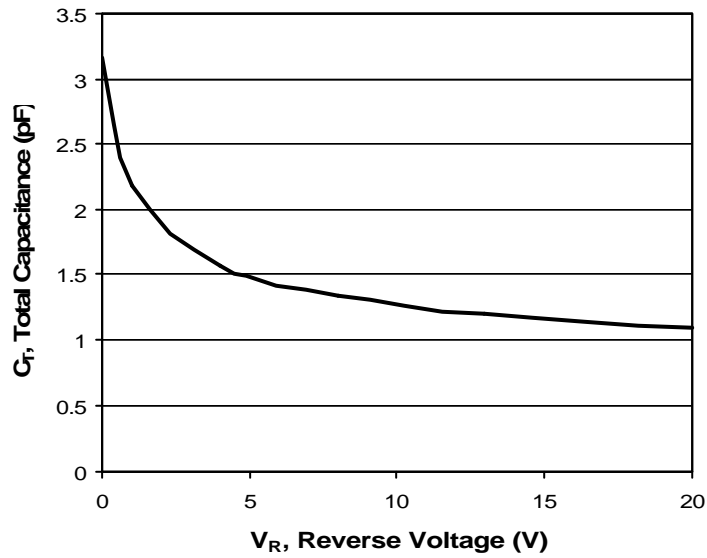
**ELECTRICAL CHARACTERISTICS CURVES (each diode)**



**Figure 1. Typical Forward Voltage**



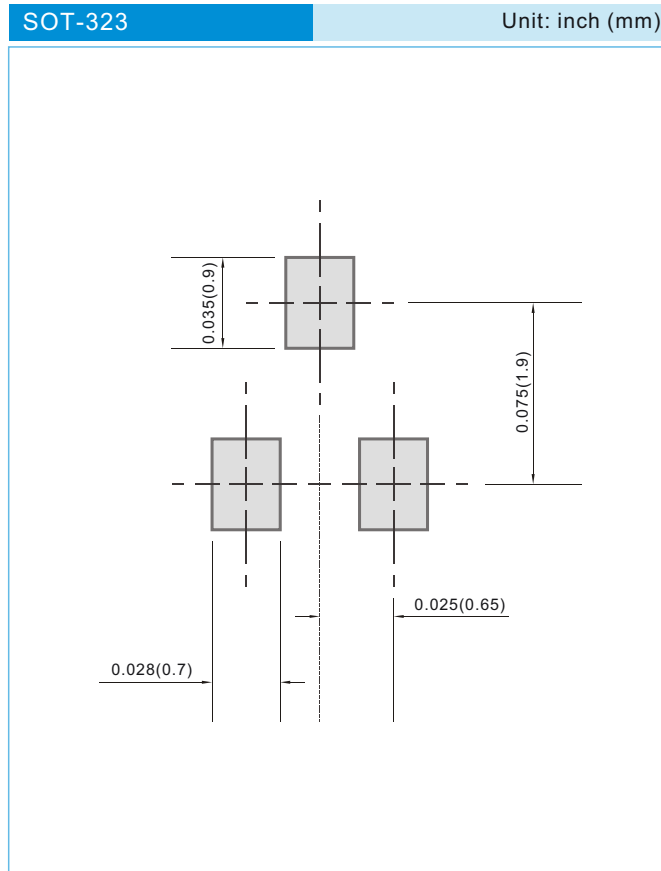
**Figure 2. Typical Reverse Current**



**Figure 3. Typical Total Capacitance**



## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information
  - T/R - 12K per 13" plastic Reel
  - T/R - 3.0K per 7" plastic Reel

## LEGAL STATEMENT

### IMPORTANT NOTICE

This information is intended to unambiguously characterize the product in order to facilitate the customer's evaluation of the device in the application. The information will help the customer's technical experts determine that the device is compatible and interchangeable with similar devices made by other vendors. The information in this data sheet is believed to be reliable and accurate. The specifications and information herein are subject to change without notice. New products and improvements in products and product characterization are constantly in process. Therefore, the factory should be consulted for the most recent information and for any special characteristics not described or specified.

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