



# MMBD717W SERIES

## SURFACE MOUNT SCHOTTKY DIODES

**VOLTAGE** 20 Volts **CURRENT** 200 mA

**SOT-323** Unit: inch (mm)

### FEATURES

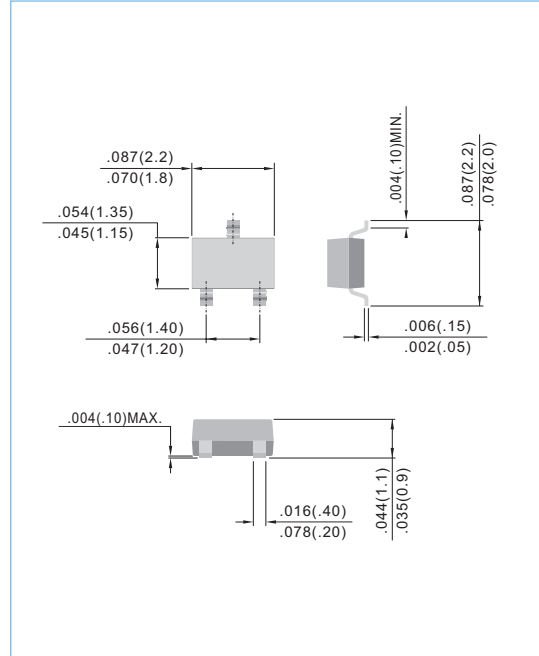
- Very Low  $V_F$ : 0.37V (Typ) at  $I_F = 1\text{mA}$
- Low Capacitance: 2.5 pF (Max) at  $V_R=0\text{V}$
- Extremely Fast Switching Speed
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

Case: SOT-323, Plastic

Terminals: Solderable per MIL-STD-750, Method 2026

Approx. Weight: 0.041 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

PARAMETER	SYMBOL	MMBD717W	MMBD717AW	MMBD717CW	MMBD717SW	UNITS
Marking Code	-	P70	P72	P73	P74	-
Maximum Reverse Voltage	$V_R$	20				V
Peak Reverse Voltage	$V_{RRM}$	20				V
Maximum Forward Current	$I_F$	0.2				A
Power Dissipation (Note 1)	$P_{TOT}$	200				mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	556				°C/W
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to 150				°C
Circuit Figure	-	SINGLE	COMMON ANODE	COMMON CATHODE	SERIES	-

Note : 1. FR-4 Board = 70 x 60 x 1mm.

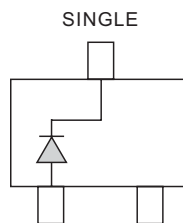


FIG.14

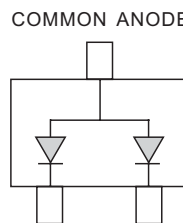


FIG.15

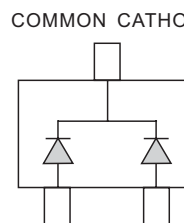


FIG.16

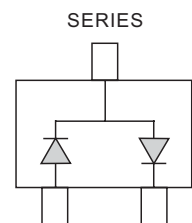


FIG.17

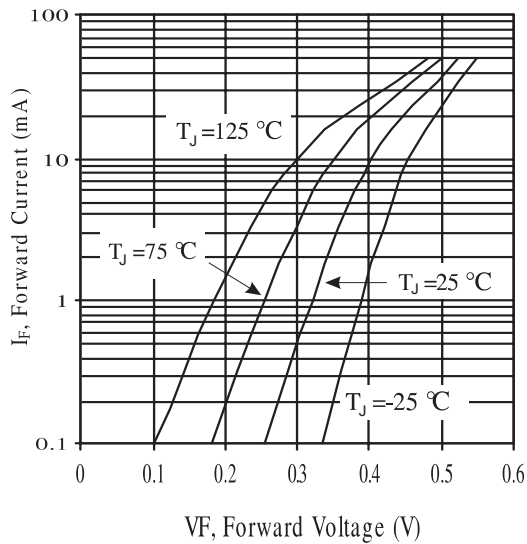


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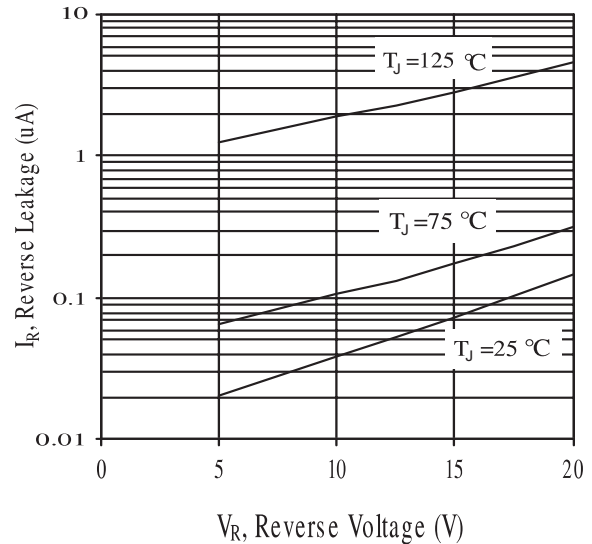
## ELECTRICAL CHARACTERISTICS (each diode) ( $T_J = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=10\ \mu\text{A}$	20	--	--	V
Reverse Leakage Current	$I_R$	$V_R=10\ \text{V}$	--	--	1.0	$\mu\text{A}$
Forward Voltage	$V_F$	$I_F=1.0\text{mA}$	--	--	0.37	V
Total Capacitance	$C_T$	$V_R=0\text{V}, f=1.0\text{MHz}$	--	--	2.5	pF

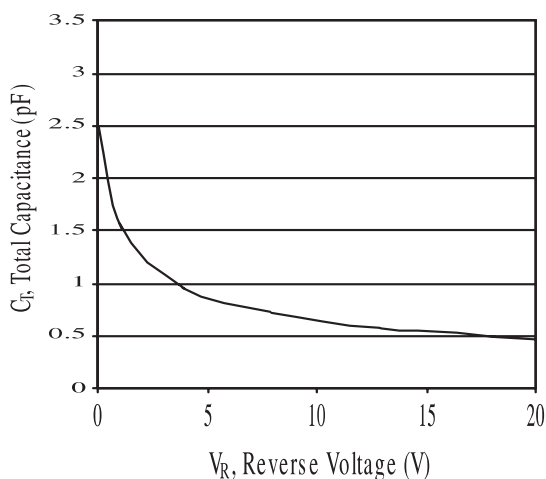
## ELECTRICAL CHARACTERISTICS CURVE



**Figure 1. Typical Forward Voltage**



**Figure 2. Typical Reverse Current**

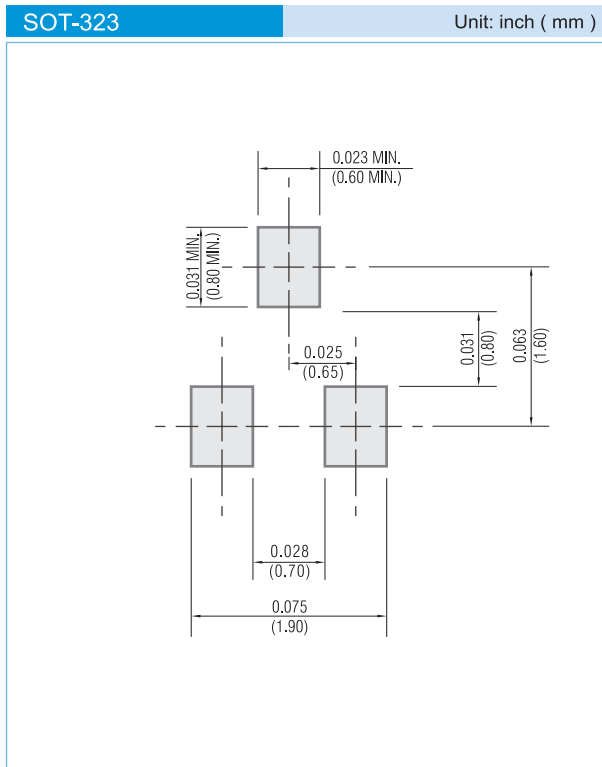


**Figure 3. Typical Total Capacitance**



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information
  - T/R - 12K per 13" plastic Reel
  - T/R - 3K per 7" plastic Reel

## LEGAL STATEMENT

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