



# MMBD717W SERIES

## SURFACE MOUNT SCHOTTKY DIODES

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

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

### FEATURES

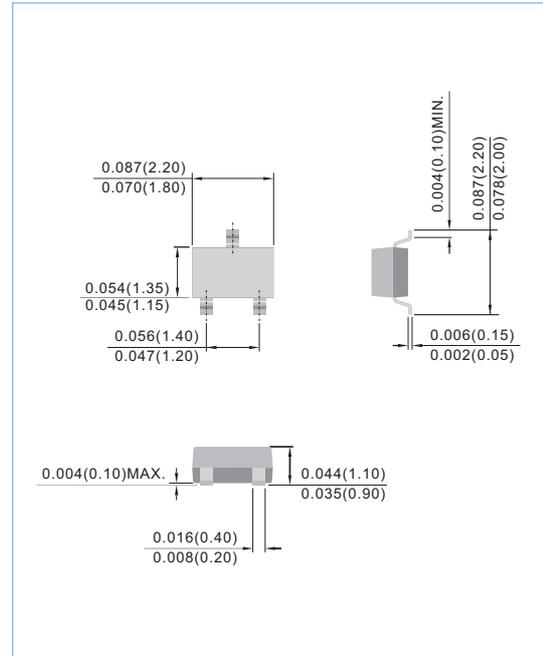
- Very Low  $V_F$ : 0.37V (Typ) at  $I_F = 1\text{mA}$
- Low Capacitance: 2.5 pF (Max) at  $V_R=0\text{V}$
- Extremely Fast Switching Speed
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

Case: SOT-323, Plastic

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

Approx. Weight: 0.005 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.

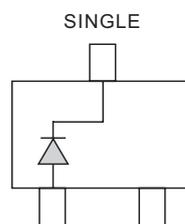


FIG.14

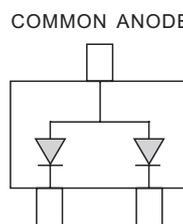


FIG.15

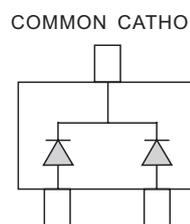


FIG.16

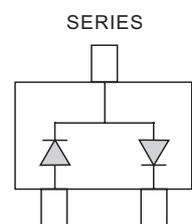


FIG.17

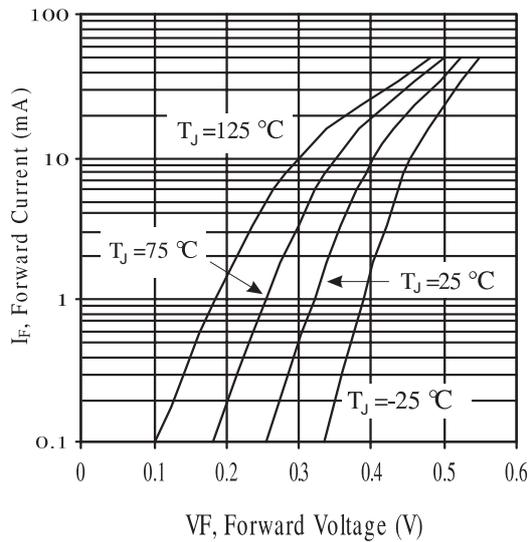


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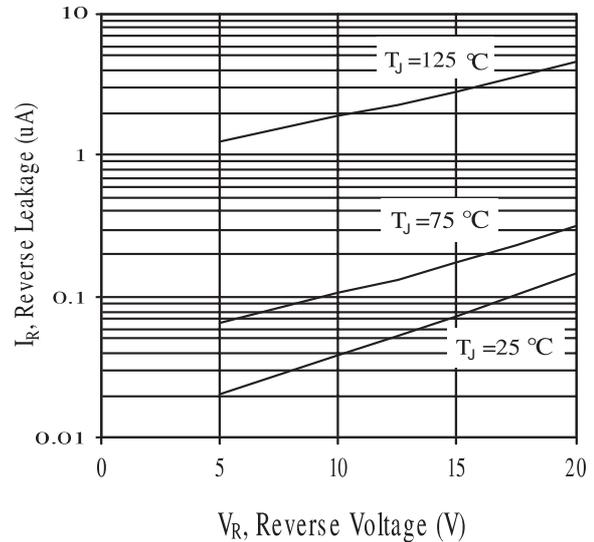
## ELECTRICAL CHARACTERISTICS (each diode) ( $T_J = 25^\circ\text{C}$ unless otherwise noted)

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

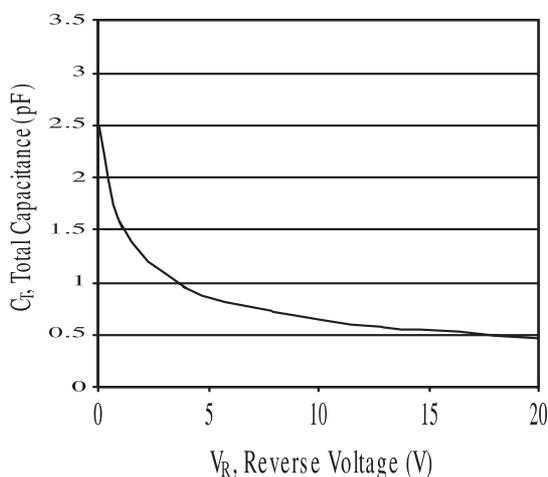
## ELECTRICAL CHARACTERISTICS CURVE



**Figure 1. Typical Forward Voltage**



**Figure 2. Typical Reverse Current**

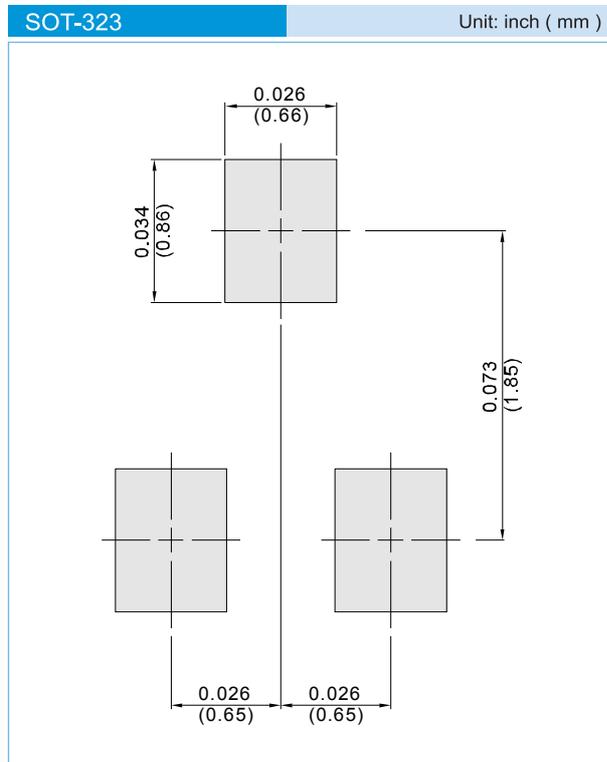


**Figure 3. Typical Total Capacitance**



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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



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## Part No\_packing code\_Version

MMBD717W\_R1\_00001

MMBD717W\_R2\_00001

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			



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