



### SURFACE MOUNT HIGH FREQUENCY SCHOTTKY DIODE

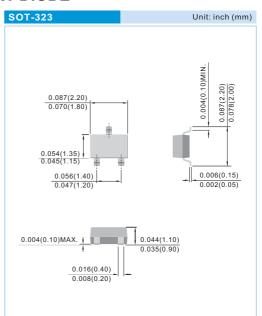
 VOLTAGE
 30 Volts
 POWER
 200mWatts
 SOT-323

### **FEATURES**

- Low Capacitance: 1.5 pF (Max) at V<sub>R</sub>=15V
- Very Low V<sub>F</sub>: 0.36V (Typ) at I<sub>F</sub> = 1mA
- 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 case.
- Terminals : Solderable per MIL-STD-750, Method 2026
- Weight: approximately 0.005 gram



#### MAXIMUM RATINGS AND THERMAL CHARACTERISTICS

Parameter	Symbol	MMBD330W	Units
Marking Code	-	330	-
Reverse Voltage	V <sub>R</sub>	30	V
Peak Reverse Voltage	V <sub>RRM</sub>	30	V
Maximum Forward Current	l <sub>F</sub>	0.2	А
Power Dissipation (1)	P <sub>tot</sub>	200	mW
Thermal Resistance , Junction to Ambient (1)	R <sub>eJ A</sub>	635	°C/W
Junction Temperature Range	T <sub>J</sub>	-55 to +125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

#### NOTE:

1. FR-4 Board = 70 X 60 X 1mm.

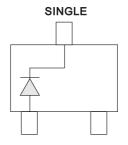


Fig.14

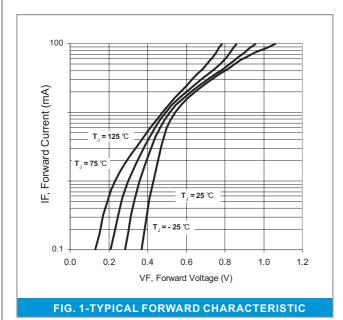


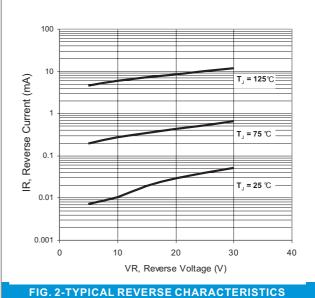


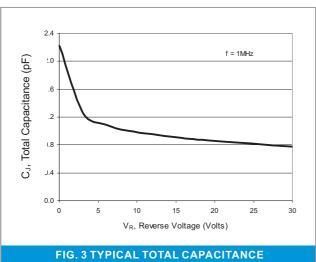
### ELECTRICAL CHARACTERISTICS (T<sub>1</sub>=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min.	Тур.	Max.	Units
Reverse Breakdown Voltage	V <sub>(BR)</sub>	I <sub>R</sub> =10μA	30	-	1	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =25V	-	-	0.2	μА
Forword Voltage	V <sub>F</sub>	I <sub>F</sub> =1.0mA	-	-	0.45	V
Forword Voltage	V <sub>F</sub>	I <sub>F</sub> =10mA	-	-	0.6	V
Total Capacitance	C	V <sub>R</sub> =15V, f=1.0MHz	-	-	1.5	pF

#### **ELECTRICAL CHARACTERISTICS CURVES**



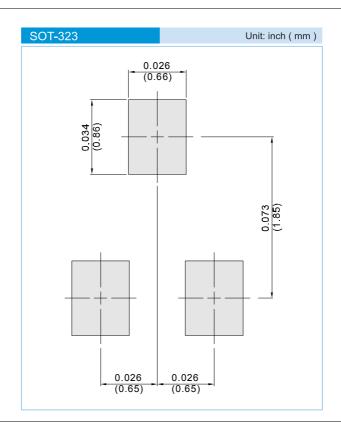








#### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

· Packing information

T/R - 12K per 13" plastic Reel

T/R - 3K per 7" plastic Reel

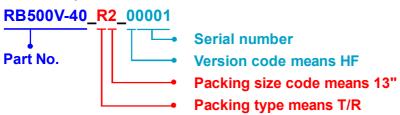




### Part No\_packing code\_Version

MMBD330W\_R1\_00001 MMBD330W\_R2\_00001

### For example:



Packing Code XX			Version Code XXXXX			
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)	Α	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	В	13"	2			
Tube Packing (T/P)	Т	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			





# Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.