



### SURFACE MOUNT HIGH FREQUENCY SCHOTTKY DIODE

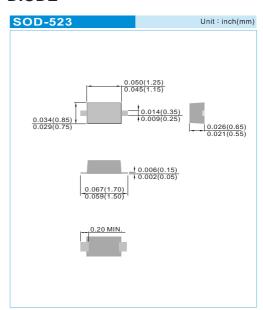
VOLTAGE 7.0 Volt POWER 200mWatt

#### **FEATURES**

- Low Capacitance, Minimizing Insertion Losses in VHF Applications
- Low Inductance, Small Lead-Length(SOD-523) Package
- Low  $V_F$ : 0.5V (Typ) at  $I_F$  = 10mA
- Extremely Fast Switching Speed
- Lead free in compliance with EU RoHS 2011/65/EU directive
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#### **MECHANICAL DATA**

- Case: SOD-523 plastic case.
- Terminals : Solderable per MIL-STD-750, Method 2026
- Standard packaging: 8mm tape
- Approx Weight: 0.00005 ounces, 0.0014 grams



#### **MAXIMUM RATINGS AND THERMAL CHARACTERISTICS**

Parameter	Symbol	MMBD101TS	Units
Marking Code	-	10	-
Reverse Voltage	V <sub>R</sub>	7	V
Forward Power Dissipation	P <sub>F</sub>	200	mW
Termal Resistance , Junction to Ambient (Note 1)	R <sub>eJA</sub>	500	°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.



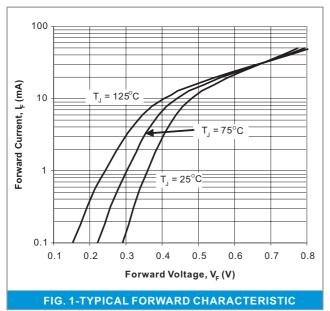


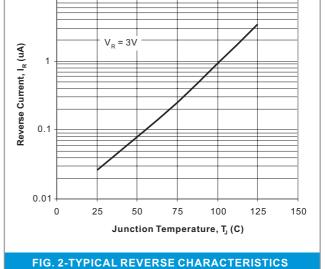
### ELECTRICAL CHARACTERISTICS (T<sub>J</sub>=25°C unless otherwise noted)

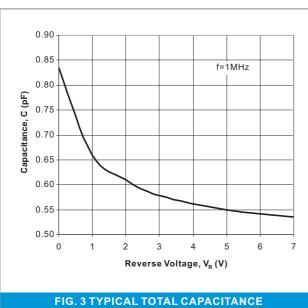
Parameter	Symbol	Test Condition	Min.	Тур.	Max.	Units
Reverse Breakdown Voltage	V <sub>(BR)</sub>	I <sub>R</sub> =10μA	7.0	10	-	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =3.0V	-	-	0.25	μΑ
Forword Voltage	V <sub>F</sub>	I <sub>F</sub> =10mA	-	-	0.6	V
Total Capacitance	CJ	f=1.0MHz , V <sub>R</sub> =0V	-	0.88	1.0	pF

10

#### **ELECTRICAL CHARACTERISTICS CURVES**





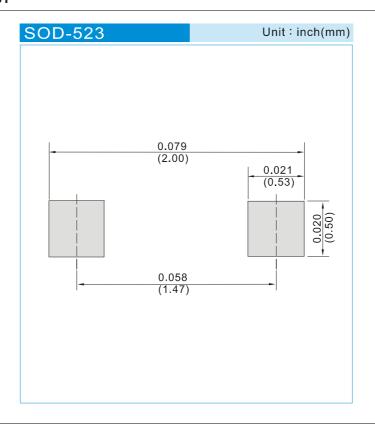


TIO. 2 TH TOAL REVERSE SHARASTERISTICS





#### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

• Packing information

T/R - 12K per 13" plastic Reel

T/R - 5K per 7" plastic Reel





## Part No\_packing code\_Version

MMBD101TS\_R1\_00001 MMBD101TS\_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)	A	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			





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