



# MMBD301TS

## SURFACE MOUNT SCHOTTKY DIODE

**VOLTAGE** 30 Volts      **POWER** 200mWatts

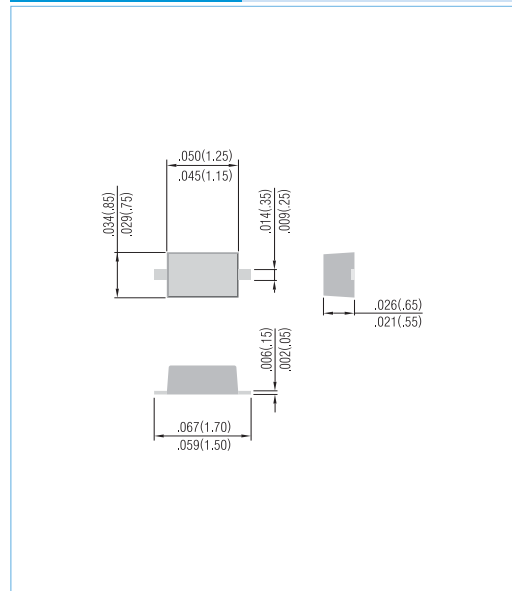
SOD-523      Unit: inch ( mm )

### FEATURES

- Low Capacitance : 1.5pF(Max)at  $V_R=15V$
- Very Low  $V_F$  : 0.36V (Typ) at  $I_F = 1mA$
- Extremely Fast Switching Speed
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: SOD-523 plastic case.
- Terminals : Solderable per MIL-STD-750,Method 2026
- Standard packaging: 8mm tape
- Weight: approximately 0.002gram
- Marking : 30



## ABSOLUTE RATINGS AND THERMAL CHARACTERISTICS

Parameter	Symbol	MMBD301TS	Units
Marking Code	-	30	-
Maximum Reverse Voltage	$V_R$	30	V
Peak Reverse Voltage	$V_{RRM}$	30	V
Maximum Forward Current	$I_F$	0.2	A
Power Dissipation(Note 1)	$P_{TOT}$	200	mW
Thermal Resistance , Junction to Ambient (Note 1)	$R_{\theta JA}$	556	$^{\circ}C/W$
Junction Temperature Range	$T_J$	-55 to +125	$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^{\circ}C$

**NOTE:**

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

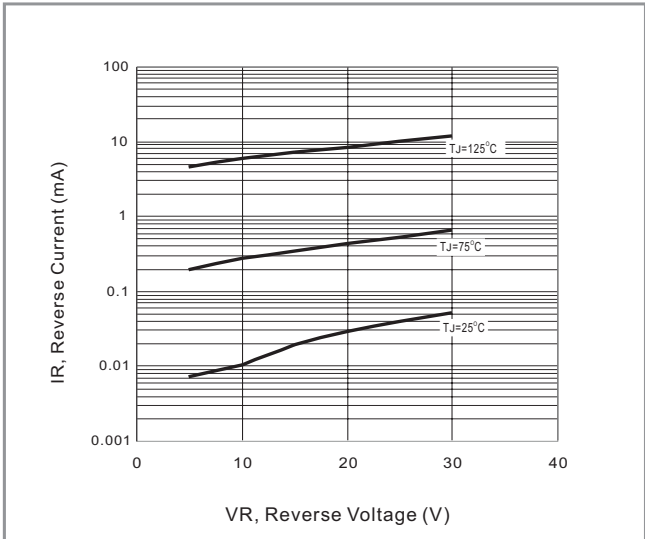


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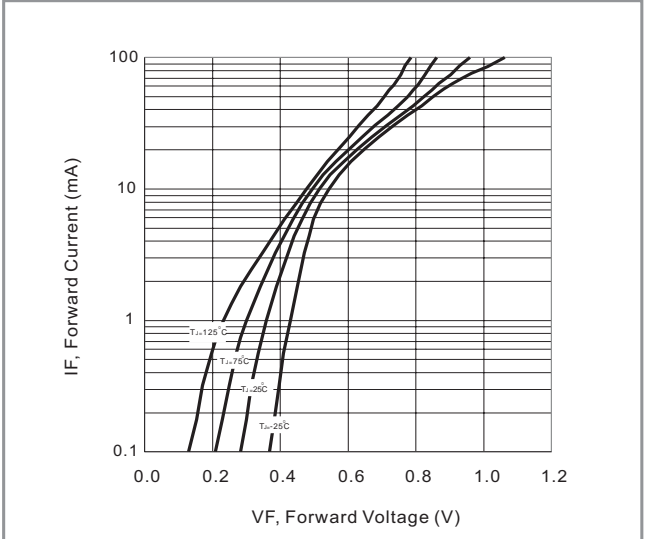
## ELECTRICAL CHARACTERISTICS ( $T_J=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	Test Condition	MIN.	TYP.	MAX.	UNIT
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=10\mu\text{A}$	30	-	-	V
Reverse Leakage Current	$I_R$	$V_R=25\text{V}$	-	-	0.2	$\mu\text{A}$
Forward Voltage	$V_F$	$I_F=1.0\text{mA}$	-	-	0.45	V
Forward Voltage	$V_F$	$I_F=10\text{mA}$	-	-	0.6	V
Total Capacitance	$C_J$	$V_R=15\text{V}, f=1.0\text{MHz}$	-	-	1.5	pF

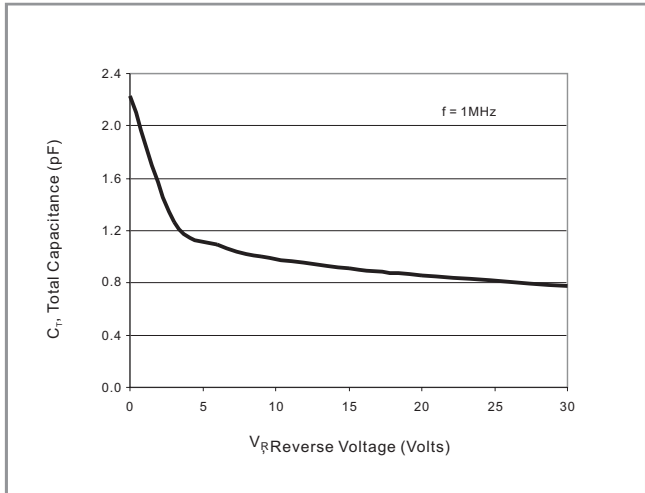
### RATING AND CHARACTERISTIC CURVES



**Fig.1 TYPICAL REVERSE CHARACTERISTICS**



**Fig.2-TYPICAL FORWARD CHARACTERISTICS**



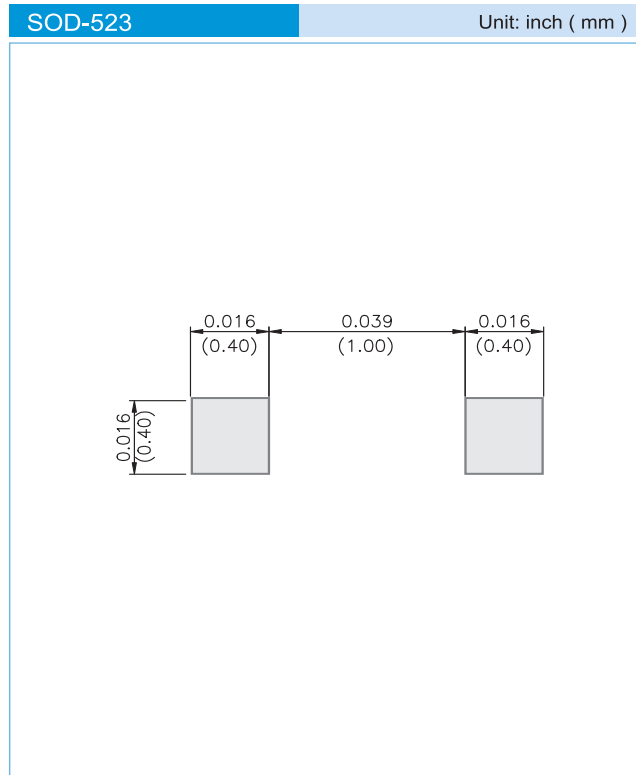
**Fig.3 TYPICAL TOTAL CAPACITANCE**




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## MOUNTING PAD LAYOUT

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## ORDER INFORMATION

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- Packing information
  - T/R - 12K per 13" plastic Reel
  - T/R - 5K per 7" plastic Reel

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## LEGAL STATEMENT

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