



MMBD701

SURFACE MOUNT SCHOTTKY DIODE

VOLTAGE 70 Volts **POWER** 180mWatts

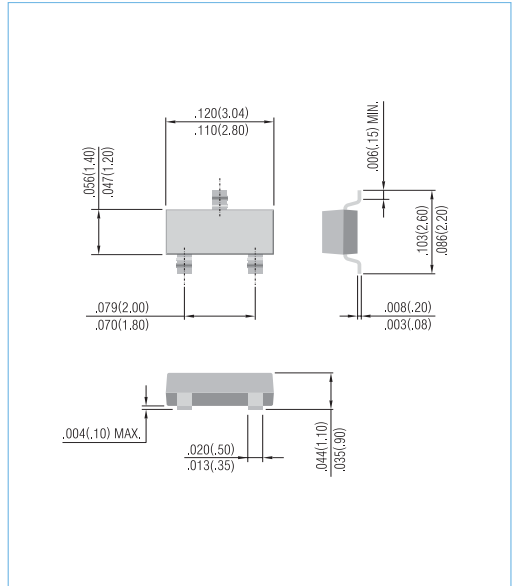
SOT-23 Unit: inch (mm)

FEATURES

- Extremely low minority carrier lifetime
- Low capacitance (0.4pF @ 20V typical)
- Low reverse leakage (30nA @ 35V typical)
- Surface mount package ideally suited for automatic insertion
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: SOT-23 plastic case.
- Terminals : Solderable per MIL-STD-750,Method 2026
- Weight: approximately 0.0041gram



MAXIMUM RATINGS AND THERMAL CHARACTERISTICS

Parameter	Symbol	MMBD701	Units
Marking Code	-	701	-
Reverse Voltage	V_R	70	V
Peak Reverse Voltage	V_{RRM}	70	V
Maximum Forward Current	I_F	0.25	A
Power Dissipation (1)	P_{tot}	180	mW
Thermal Resistance , Junction to Ambient (1)	$R_{\theta JA}$	556	°C/W
Junction Temperature Range	T_J	-55 to +125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

NOTE:

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

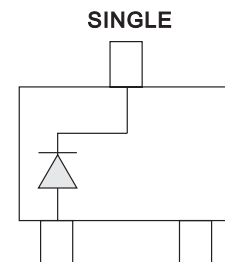


Fig.14



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

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Units
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=10\mu\text{A}$	70	-	-	V
Reverse Leakage Current	I_R	$V_R=35\text{V}$	-	-	0.2	μA
Forward Voltage	V_F	$I_F=1.0\text{mA}$	-	-	0.5	V
Forward Voltage	V_F	$I_F=10\text{mA}$	-	-	1.0	V
Total Capacitance	C_J	$V_R=20\text{V}, f=1.0\text{MHz}$	-	-	1.5	pF

ELECTRICAL CHARACTERISTICS CURVES

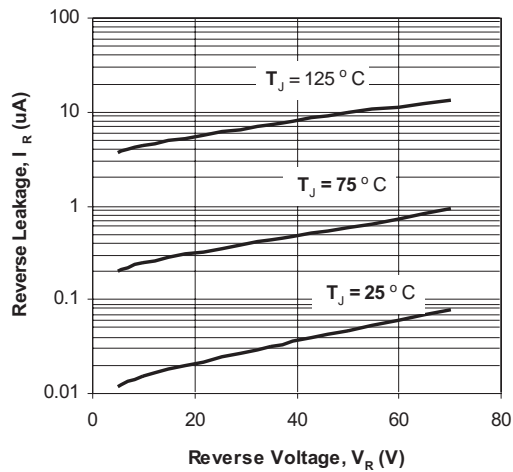


FIG. 1-Typical Reverse Leakage

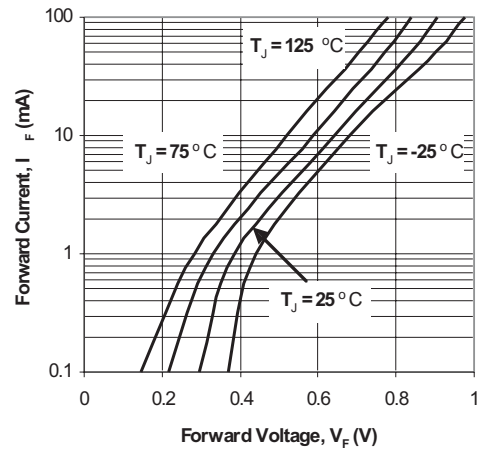


FIG. 2-Typical Forward Voltage

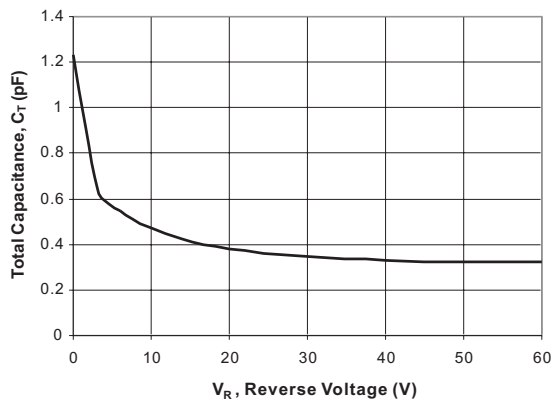
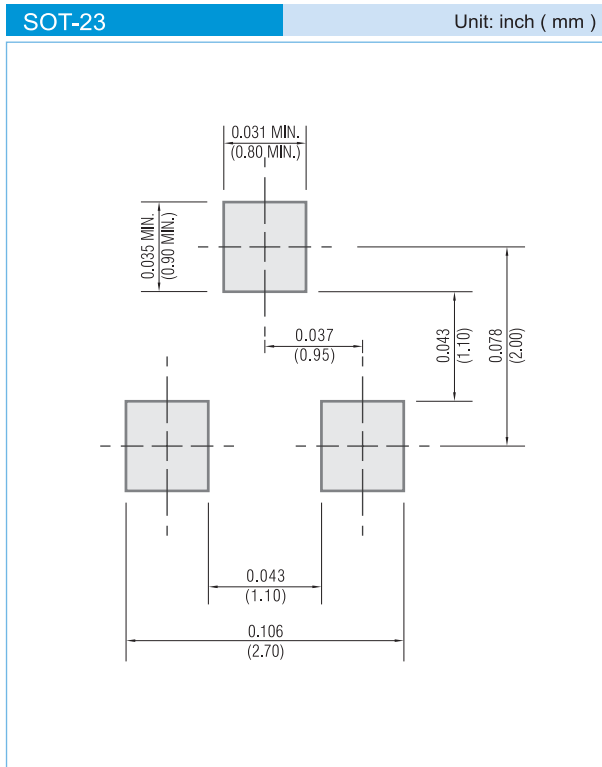


FIG. 3 TYPICAL TOTAL CAPACITANCE



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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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