



MMBD301/MMBD452

SURFACE MOUNT SCHOTTKY DIODE

VOLTAGE 30 Volts **POWER** 200mWatts

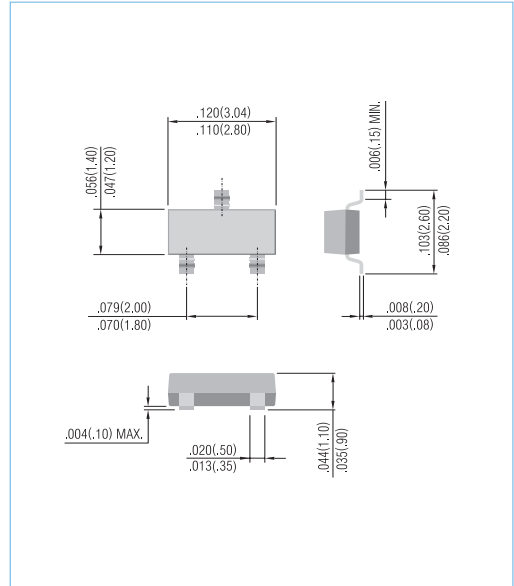
SOT-23 Unit: inch (mm)

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: SOT-23 plastic case.
- Terminals : Solderable per MIL-STD-750,Method 2026
- Standard packaging: 8mm tape
- Weight: approximately 0.008gram



ABSOLUTE RATINGS AND THERMAL CHARACTERISTICS

Parameter	Symbol	MMBD301	MMBD452	Units
Marking Code	-	301	452	-
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		°C/W
Junction Temperature Range	T_J	-55 to +125		°C
Storage Temperature Range	T_{STG}	-55 to +150		°C
Circuit Figure	-	SINGLE	SERIES	-

NOTE:

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

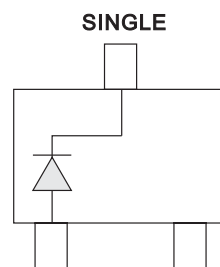


Fig.14

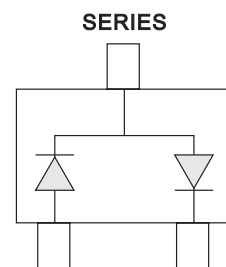


Fig.17



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ELECTRICAL CHARACTERISTICS (T_J=25°C unless otherwise noted)

PARAMETER	SYMBOL	Test Condition	MIN.	TYP.	MAX.	UNIT
Reverse Breakdown Voltage	V _(BR)	I _R =10μA	30			V
Reverse Leakage Current	I _R	V _R =25V			0.2	μA
Forward Voltage	V _F	I _F =1.0mA			0.45	V
Forward Voltage	V _F	I _F =10mA			0.6	V
Total Capacitance	C _J	V _R =15V, f=1.0MHz			1.5	pF

RATING AND CHARACTERISTIC CURVES

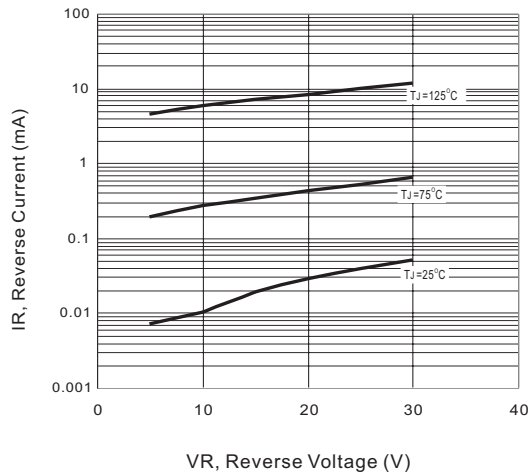


Fig.1 TYPICAL REVERSE CHARACTERISTICS

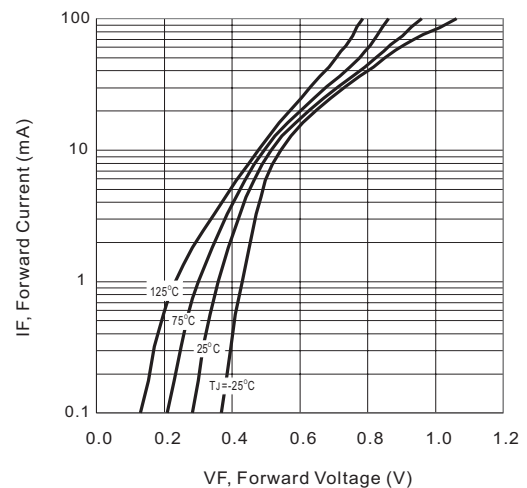


Fig.2-TYPICAL FORWARD CHARACTERISTICS

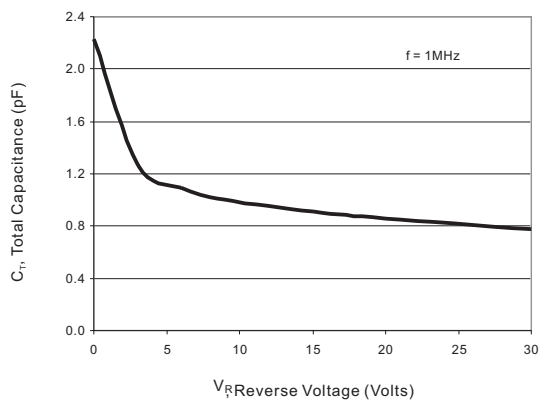
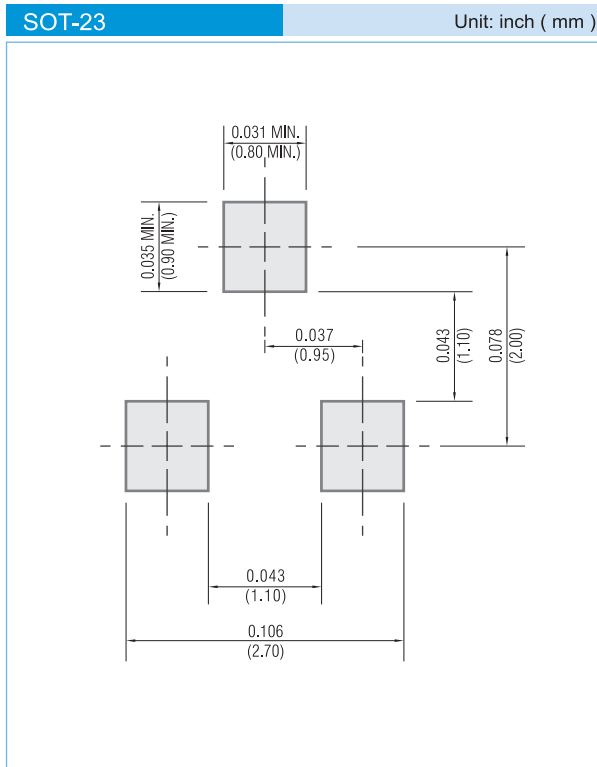


Fig.3 TYPICAL TOTAL CAPACITANCE



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel

LEGAL STATEMENT

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