



MMBV3700

SURFACE MOUNT PIN DIODE

VOLTAGE 200 Volts **POWER** 200 mW

SOT-23 Unit: inch (mm)

FEATURES

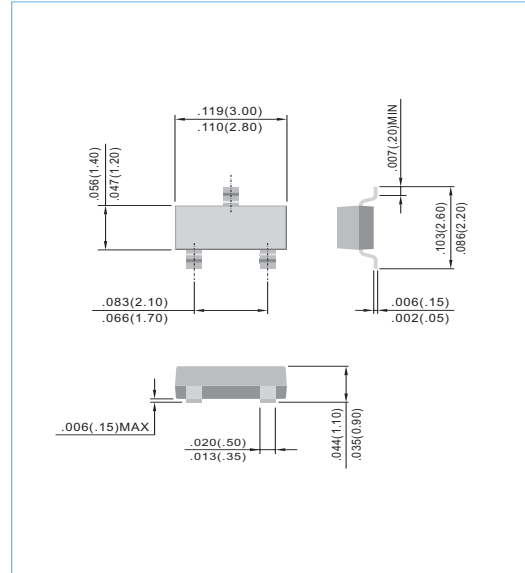
- High reverse breakdown voltage (200V min)
- Very low series resistance at 100MHz (0.7Ω typical @ $I_F=10\text{mA}$)
- Long minority carrier lifetime ($T_{rr}=300\text{ns}$ typical)
- Low capacitance (0.5 pF typical @ $V_R=20\text{V}$)
- Surface mount package ideally suited for automatic insertion
- Pb free product are available : 99% Sn above can meet RoHS environment substance directive request

MECHANICAL DATA

Case: SOT-23, Plastic

Terminals: Solderable per MIL-STD-750, Method 2026

Approx. Weight: 0.008 gram



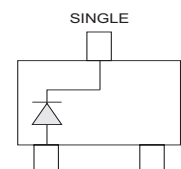
ABSOLUTE RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Reverse Voltage	V_R	200	V
Continuous Forward Current	I_F	0.2	A

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation (1)	P_{TOT}	200	mW
Thermal Resistance, Junction to Ambient (1)	$R_{\theta JA}$	625	°C/W
Junction Temperature	T_J	-55 to 150	°C
Storage Temperature	T_{STG}	-55 to 150	°C

Note 1. FR-5 Board=1.0x0.75x0.062 in.





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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	$V_{(BR)}$	$I_R=10\mu\text{A}$	200	-	-	V
Reverse Current	I_R	$V_R=150\text{V}$	-	-	100	nA
Series Resistance	R_S	$I_F=10\text{mA}, f=100\text{MHz}$	-	0.7	1.0	Ω
Total Capacitance	C_T	$V_R=20\text{V}, f=1\text{MHz}$	-	0.7	1.0	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10\text{mA}$	-	300	-	ns

CHARACTERISTIC CURVES

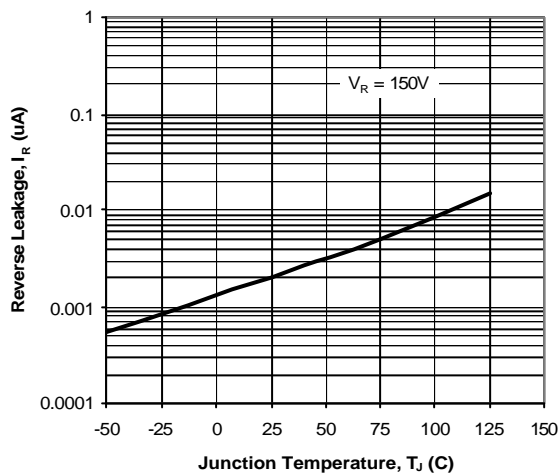


Figure 1. Leakage Current

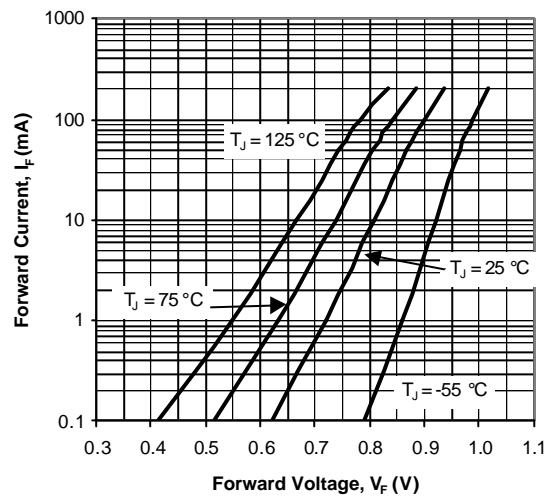


Figure 2. Forward Voltage

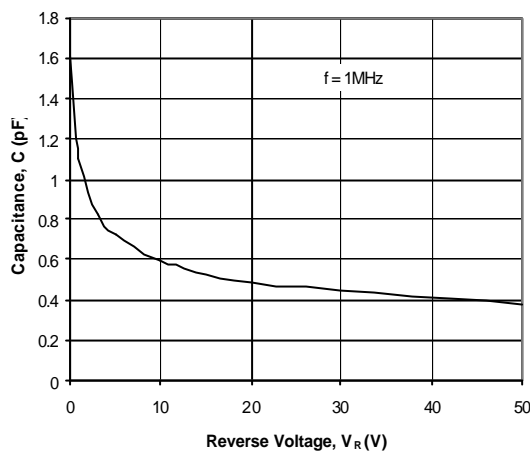


Figure 3. Capacitance

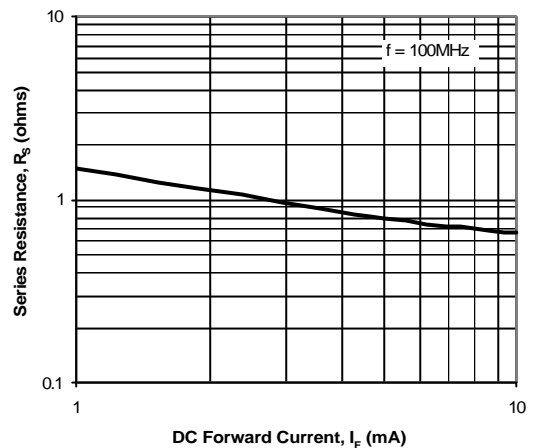
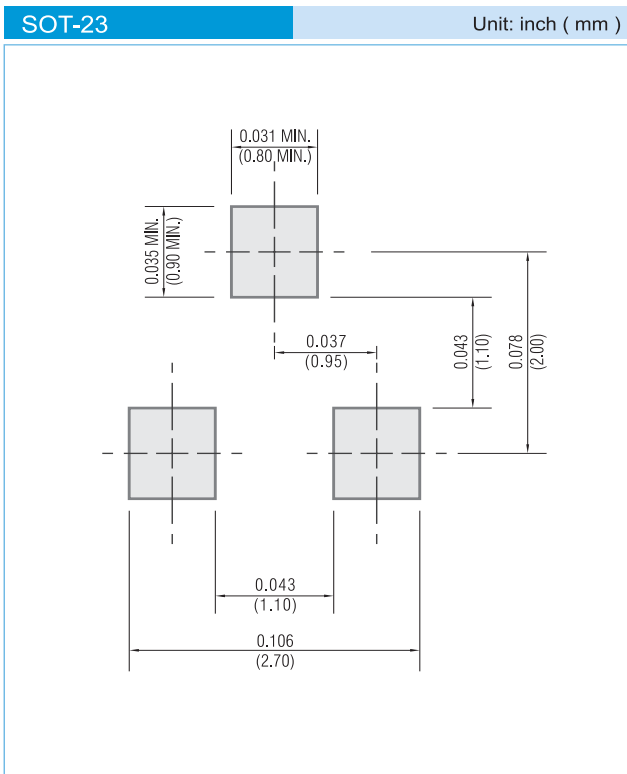


Figure 4. Series Resistance



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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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