

MMBV3700

SURFACE MOUNT PIN DIODE

VOLTAGE 200 Volts

POWER

200 mW

FEATURES

- High reverse breakdown voltage (200V min)
- Very low series resistance at 100MHz (0.7Ω typical@ $I_F=10mA$)
- Long minority carrier lifetime ($T_{rr}=300ns$ typical)
- Low capacitance (0.5 pF typical @ $V_R=20V$)
- Surface mount package ideally suited for automatic insertion
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

Case: SOT-23, Plastic

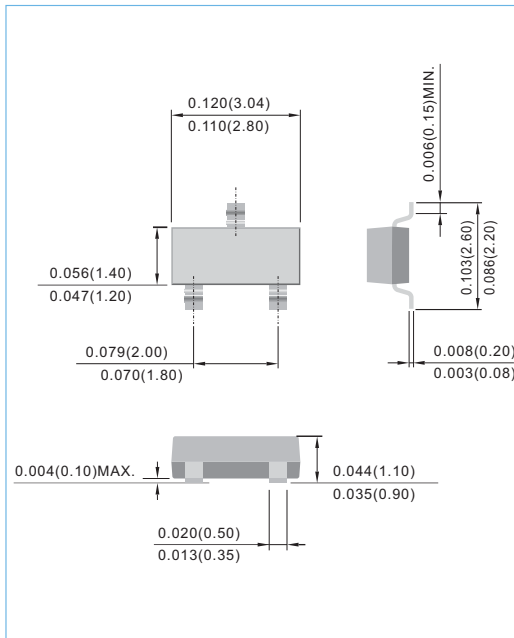
Terminals: Solderable per MIL-STD-750, Method 2026

Approx. Weight: 0.0003 ounces, 0.0084 grams

Marking: V37

SOT-23

Unit : inch(mm)



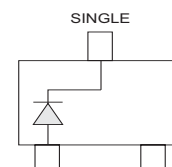
ABSOLUTE RATINGS

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	$^{\circ}C/W$
Junction Temperature	T_J	-55 to 150	$^{\circ}C$
Storage Temperature	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	$V_{(BR)}$	$I_R=10\mu\text{A}$	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

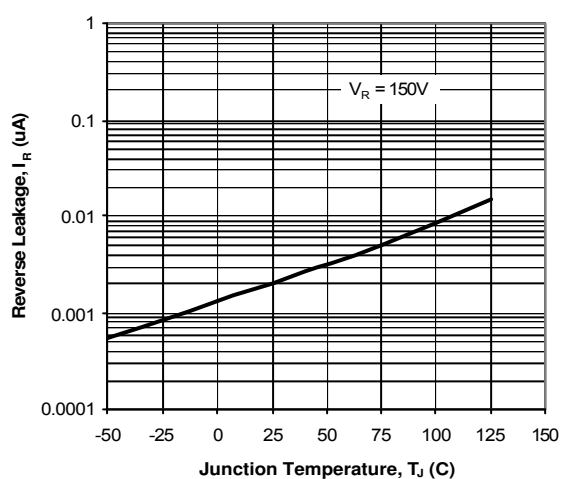


Figure 1. Leakage Current

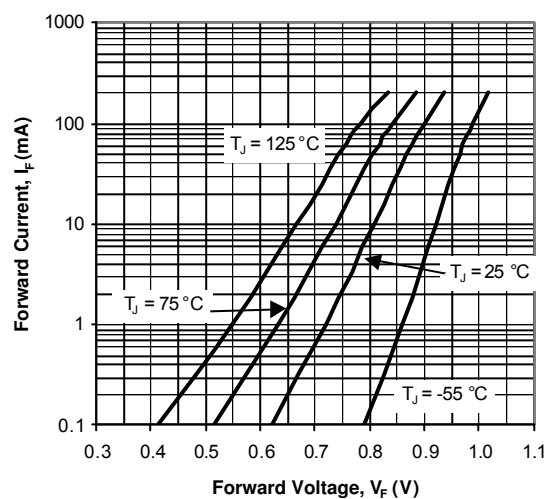


Figure 2. Forward Voltage

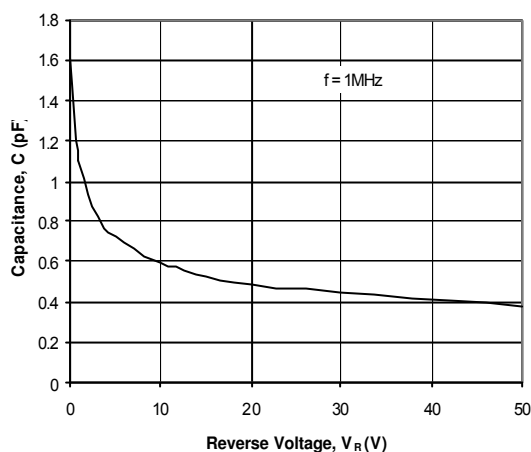


Figure 3. Capacitance

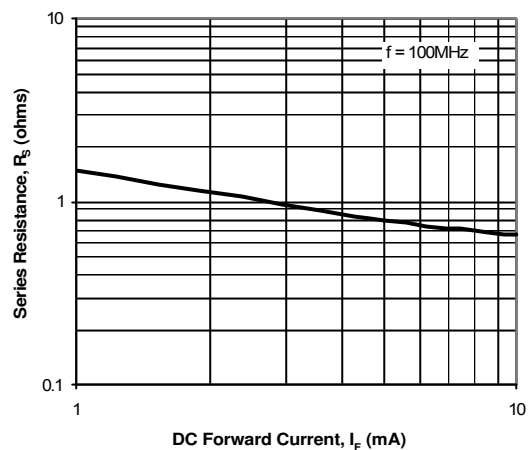
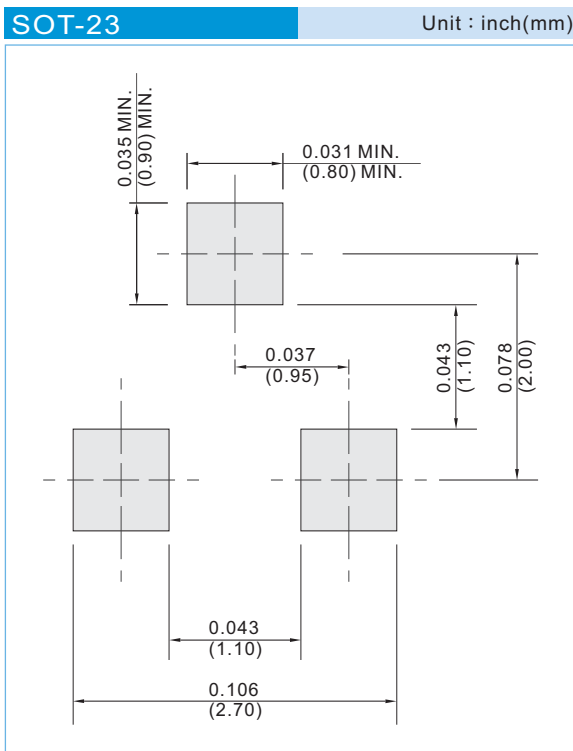


Figure 4. Series Resistance

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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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For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
T/B	A	N/A	0	HF	0	serial number
T/R	R	7"	1	RoHS	1	serial number
B/P	B	13"	2			
T/P	T	26mm	X			
TRR	S	52mm	Y			
TRL	L	PBCU	U			
FORMING	F	PBCD	D			

Part No_packing code_Version

MMBV3700_R1_00001

MMBV3700_R2_00001