

MMBV3401LT1G

Silicon Pin Diode

This device is designed primarily for VHF band switching applications but is also suitable for use in general-purpose switching circuits. Supplied in a Surface Mount package.

Features

- Rugged PIN Structure Coupled with Wirebond Construction for Optimum Reliability
- Low Capacitance – 0.7 pF (Typ) at $V_R = 20$ Vdc
- Very Low Series Resistance at 100 MHz
0.34 Ω (Typ) @ $I_F = 10$ mAdc
- These Devices are Pb-Free, Halogen Free/BFR Free and are RoHS Compliant

MAXIMUM RATINGS

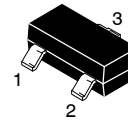
Rating	Symbol	Value	Unit
Reverse Voltage	V_R	35	Vdc
Forward Power Dissipation @ $T_A = 25^\circ\text{C}$ Derate above 25°C	P_D	200 2.0	mW mW/ $^\circ\text{C}$
Junction Temperature	T_J	+125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.



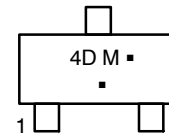
ON Semiconductor[®]

<http://onsemi.com>



SOT-23 (TO-236AB)
CASE 318-08
STYLE 8

MARKING DIAGRAM



4D = Device Code
M = Date Code*
▪ = Pb-Free Package

(Note: Microdot may be in either location)

*Date Code orientation and/or overbar may vary depending upon manufacturing location.

ORDERING INFORMATION

Device	Package	Shipping [†]
MMBV3401LT1G	SOT-23 (Pb-Free)	3000 Tape & Reel
MMBV3401LT3G	SOT-23 (Pb-Free)	10,000 Tape & Reel

[†]For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D.

MMBV3401LT1G

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

Characteristic	Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage ($I_R = 10 \mu\text{A}$)	$V_{(BR)R}$	35	-	-	Vdc
Diode Capacitance ($V_R = 20 \text{Vdc}$)	C_T	-	-	1.0	pF
Series Resistance (Figure 1) ($I_F = 10 \text{mA}$, $f = 100 \text{MHz}$)	R_S	-	-	0.7	Ω
Reverse Leakage Current ($V_R = 25 \text{Vdc}$)	I_R	-	-	0.1	μA

TYPICAL CHARACTERISTICS

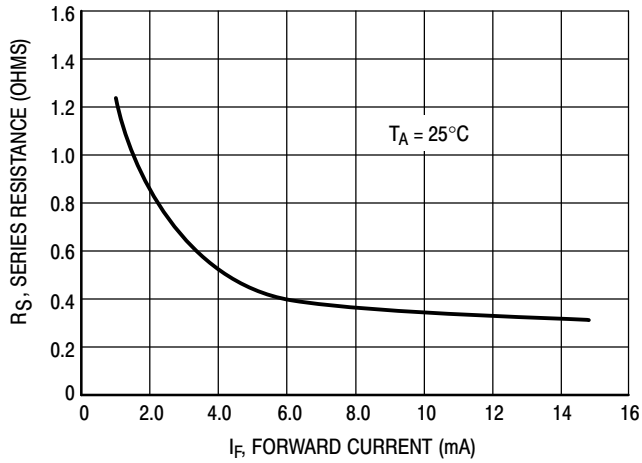


Figure 1. Series Resistance

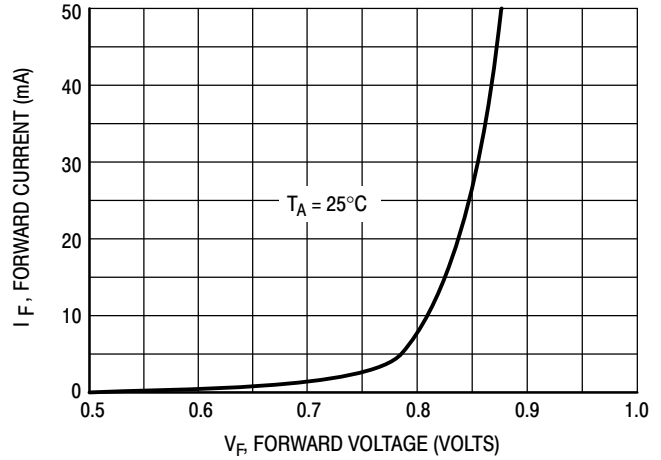


Figure 2. Forward Voltage

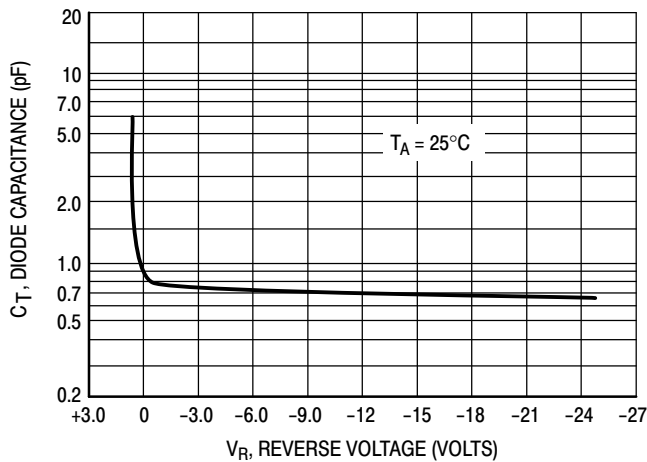


Figure 3. Diode Capacitance

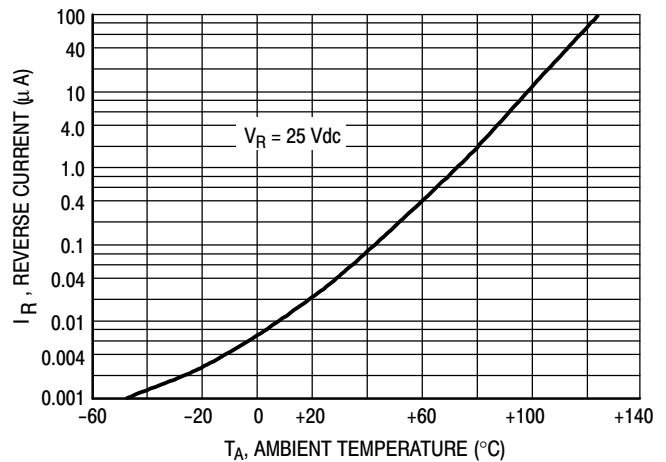


Figure 4. Leakage Current

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