

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.

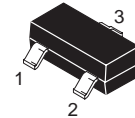
- Rugged PIN Structure Coupled with Wirebond Construction for Optimum Reliability
- Low Capacitance — 0.7 pF Typ at $V_R = 20$ Vdc
- Very Low Series Resistance at 100 MHz — 0.34 Ohms (Typ) @ $I_F = 10$ mAdc



MMBV3401LT1

Motorola Preferred Device

**SILICON PIN
SWITCHING DIODE**



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

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Reverse Voltage	V_R	20	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	$^\circ\text{C}$

DEVICE MARKING

MMBV3401LT1 = 4D

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

Characteristic	Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage ($I_R = 10 \mu\text{Adc}$)	$V_{(BR)R}$	35	—	—	Vdc
Diode Capacitance ($V_R = 20$ Vdc)	C_T	—	—	1.0	pF
Series Resistance (Figure 5) ($I_F = 10$ mAdc, $f = 100$ MHz)	R_S	—	—	0.7	Ω
Reverse Leakage Current ($V_R = 25$ Vdc)	I_R	—	—	0.1	μAdc

Preferred devices are Motorola recommended choices for future use and best overall value.

TYPICAL CHARACTERISTICS

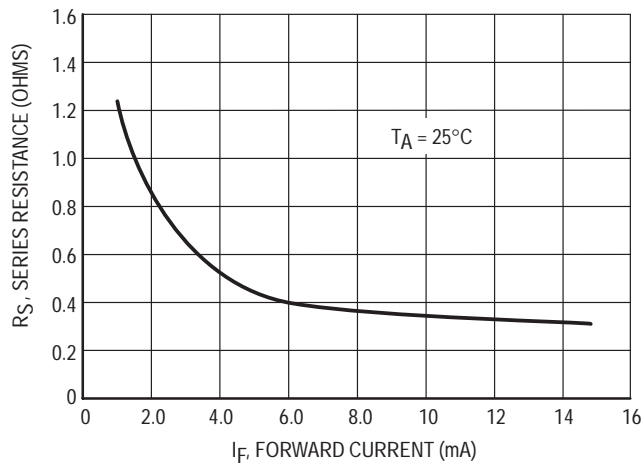


Figure 1. Series Resistance

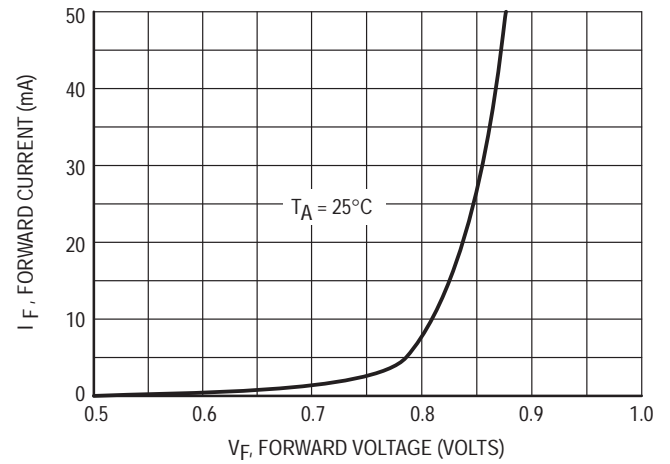


Figure 2. Forward Voltage

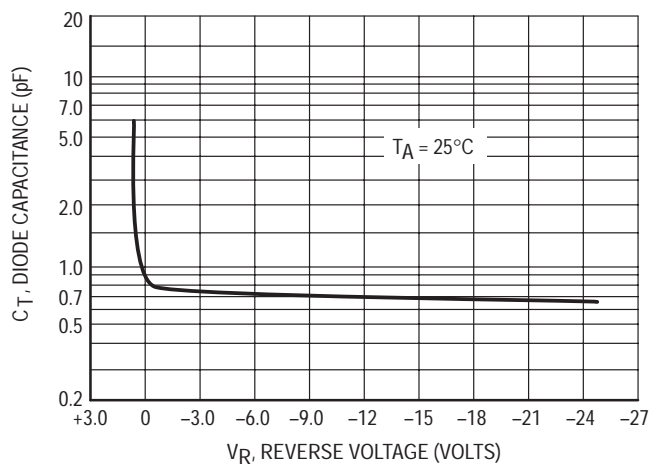


Figure 3. Diode Capacitance

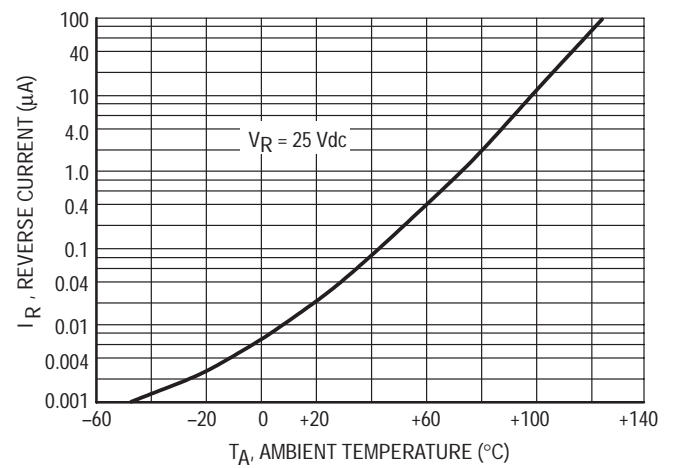


Figure 4. Leakage Current