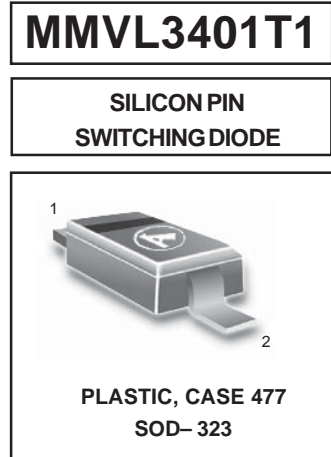


Silicon Pin Diode

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
- Device Marking: 4D



ORDERING INFORMATION

Device	Package	Shipping
MMVL3401T1	SOD-323	3000 / Tape & Reel

MAXIMUM RATINGS

Symbol	Rating	Value	Unit
V_R	Continuous Reverse Voltage	20	Vdc
I_F	Peak Forward Current	20	mAdc

THERMAL CHARACTERISTICS

Symbol	Characteristic	Max	Unit
P_D	Total Device Dissipation FR-5 Board,* $T_A = 25^\circ\text{C}$ Derate above 25°C	200 1.57	mW mW/ $^\circ\text{C}$
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	635	$^\circ\text{C}/\text{W}$
T_J, T_{stg}	Junction and Storage Temperature	150	$^\circ\text{C}$

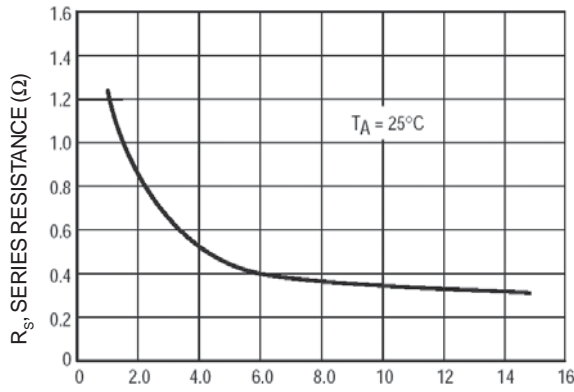
*FR-4 Minimum Pad

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

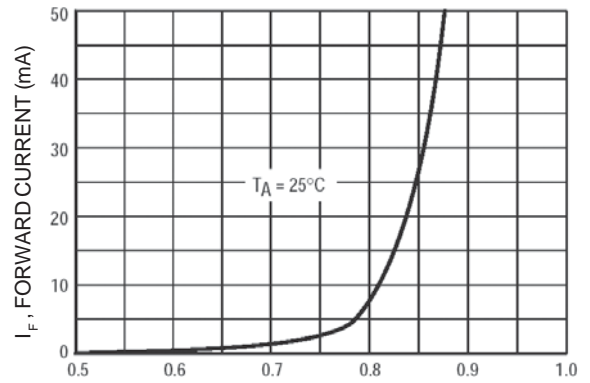
Characteristic	Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage ($I_R = 10 \mu\text{Adc}$)	$V_{(BR)R}$	35	—	—	Vdc
Diode Capacitance ($V_R = 20$ Vdc)	C_T	—	—	1.0	pF
Series Resistance ($I_F = 10$ mAdc, $f = 100\text{MHz}$)	R_S	—	—	0.7	Ω
Reverse Leakage Current ($V_R = 25$ Vdc)	I_R	—	—	0.1	μAdc

MMVL3401T1

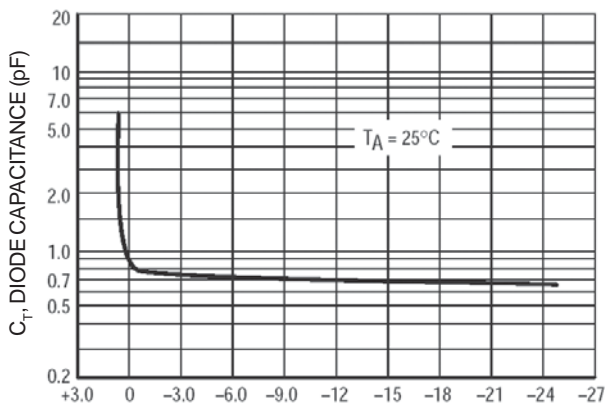
TYPICAL CHARACTERISTICS



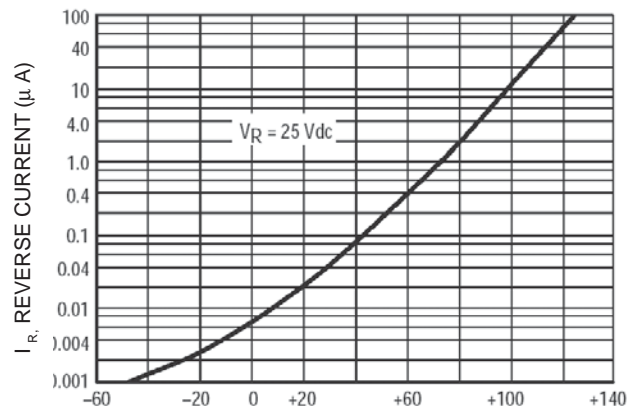
I_F , FORWARD CURRENT (mA)
Figure 1. Series Resistance



V_F , FORWARD VOLTAGE (VOLTS)
Figure 2. Forward Voltage



V_R , REVERSE VOLTAGE (VOLTS)
Figure 3. Diode Capacitance



T_A , AMBIENT TEMPERATURE (°C)
Figure 4. Leakage Current