

SOD-123 Schottky Barrier Diodes

The MMSD301 and MMSD701 devices are spin-offs of our popular MMBD301L and MMBD701L SOT-23 devices. They are designed for high-efficiency UHF and VHF detector applications. Readily available to many other fast switching RF and digital applications.

- Extremely Low Minority Carrier Lifetime
- Very Low Capacitance
- Low Reverse Leakage

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Reverse Voltage	MMSD301 MMSD701	V_R 30 70	Vdc
Forward Power Dissipation $T_A = 25^\circ\text{C}$	P_F	225	mW
Junction Temperature	T_J	-55 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$

DEVICE MARKING

MMSD301 = XT, MMSD701 = XH

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

Characteristic	Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage ($I_R = 10\ \mu\text{A}$)	MMSD301 MMSD701	$V_{(BR)R}$ 30 70	— —	— —	Volts
Diode Capacitance ($V_R = 0$, $f = 1.0\ \text{MHz}$, Note 1)	MMSD301 MMSD701	C_T — —	0.9 0.5	1.5 1.0	pF
Total Capacitance ($V_R = 15\ \text{Volts}$, $f = 1.0\ \text{MHz}$) ($V_R = 20\ \text{Volts}$, $f = 1.0\ \text{MHz}$)	MMSD301 MMSD701	C_T — —	0.9 0.5	1.5 1.0	pF
Reverse Leakage ($V_R = 25\ \text{V}$) ($V_R = 35\ \text{V}$)	MMSD301 MMSD701	I_R — —	13 9.0	200 200	nAdc nAdc
Forward Voltage ($I_F = 1.0\ \text{mAdc}$) ($I_F = 10\ \text{mA}$) ($I_F = 1.0\ \text{mAdc}$) ($I_F = 10\ \text{mA}$)	MMSD301 MMSD701	V_F — — — —	0.38 0.52 0.42 0.7	0.45 0.6 0.5 1.0	Vdc

MMSD301 MMSD701

ON Semiconductor Preferred Devices



CASE 425-04, STYLE 1
SOD-123



TYPICAL CHARACTERISTICS MMSD301

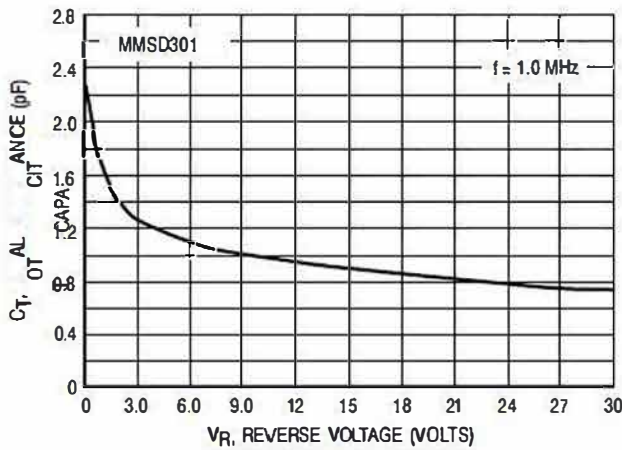


Figure 1. Total Capacitance

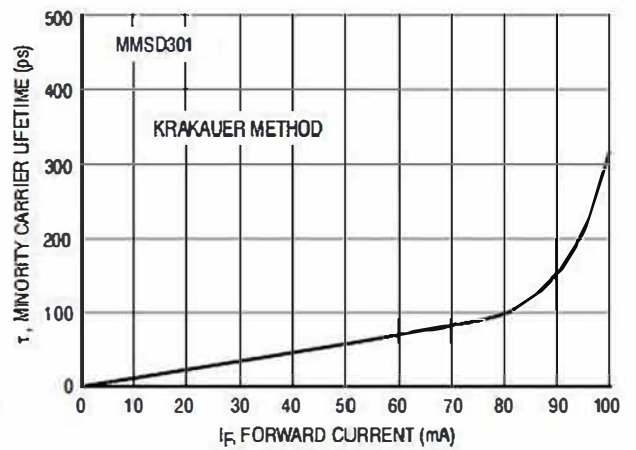


Figure 2. Minority Carrier Lifetime

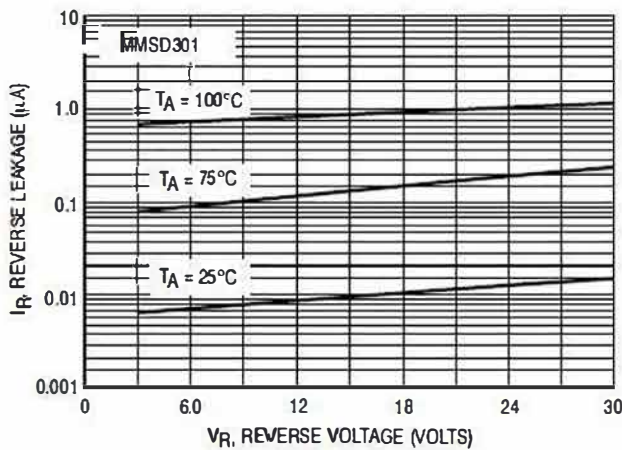


Figure 3. Reverse Leakage

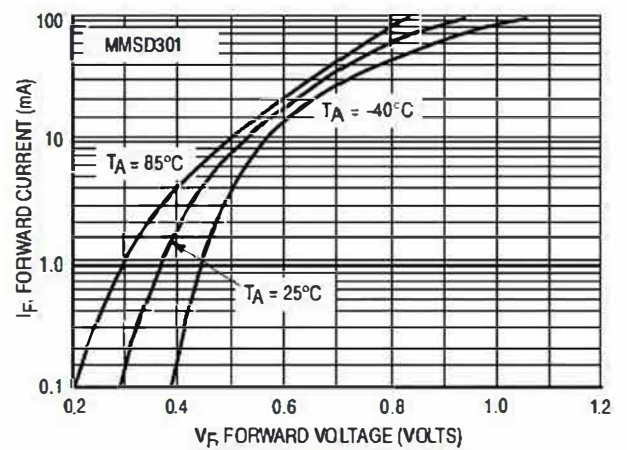


Figure 4. Forward Voltage

TYPICAL CHARACTERISTICS MMSD701

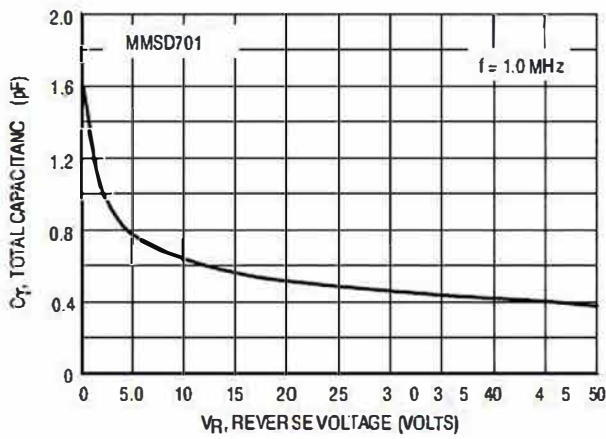


Figure 5. Total Capacitance

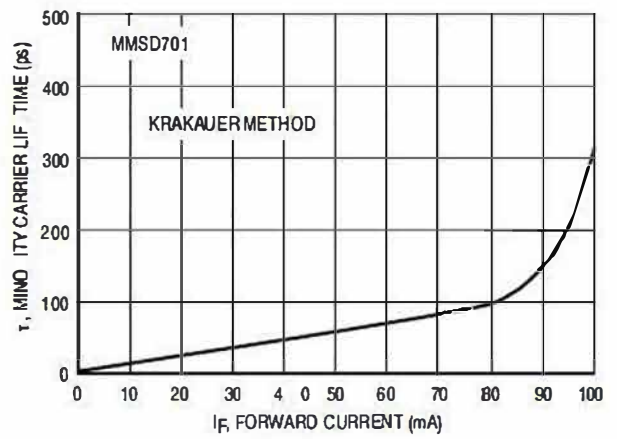


Figure 6. Minority Carrier Lifetime

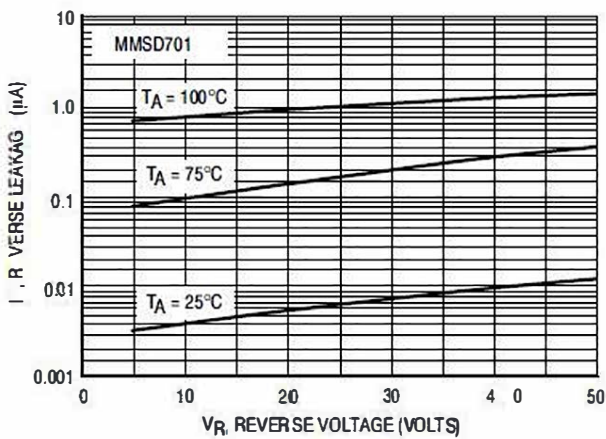


Figure 7. Reverse Leakage

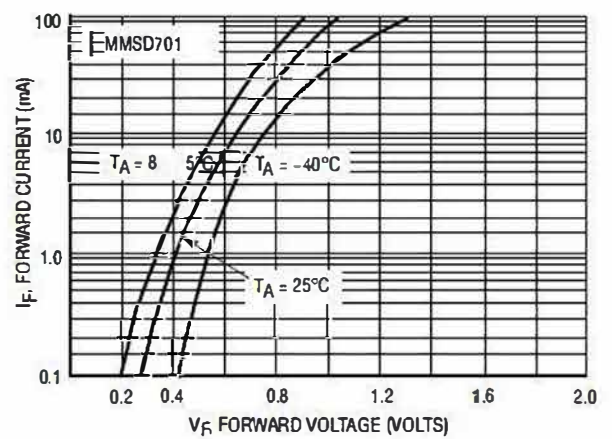


Figure 8. Forward Voltage

单击下面可查看定价，库存，交付和生命周期等信息

[>>SHIKUES\(时科\)](#)