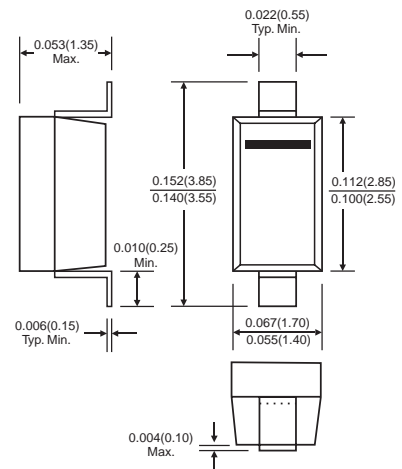

SOD-123


Dimensions in inches and (millimeters)

Features

- ◇ Extremely low minority carrier lifetime.
- ◇ Very low capacitance.
- ◇ Low reverse leakage.
- ◇ Pb-Free packages are available.

Applications

- ◇ Schottky barrier diodes.

Ordering Information

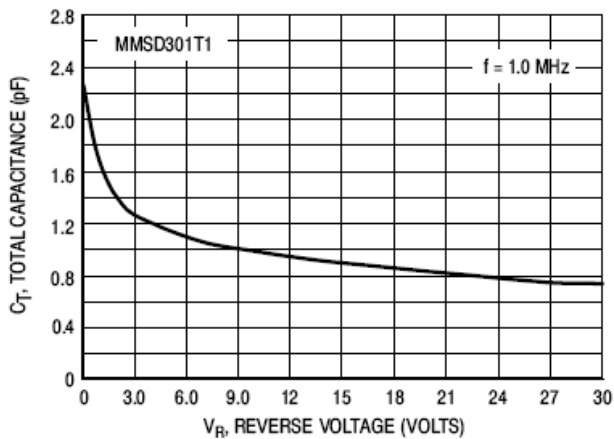
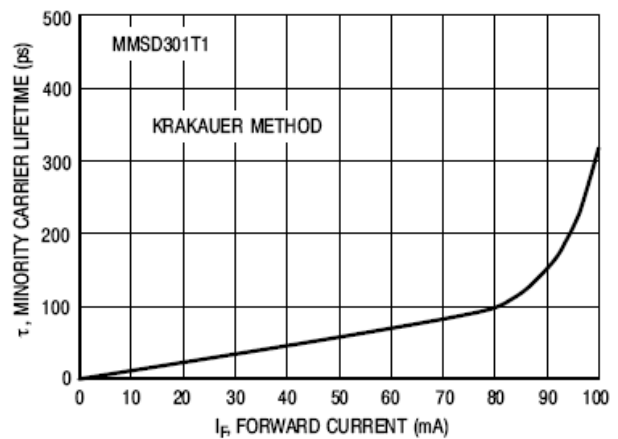
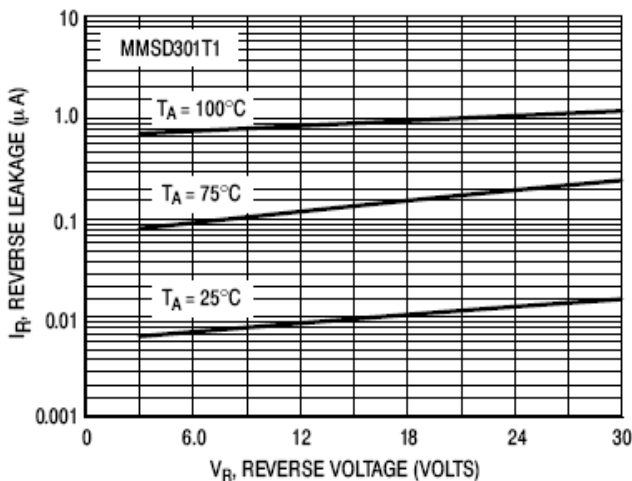
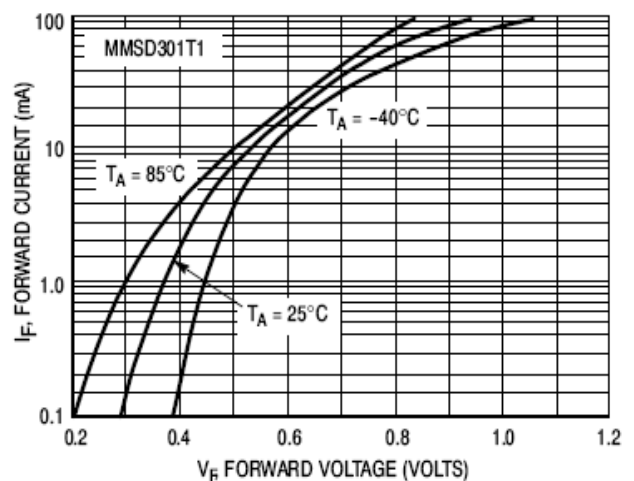
Type No.	Marking	Package Code
MMSD301	XT	SOD-123
MMSD701	XH	SOD-123

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
Repetitive peak reverse voltage	V_R	30 70	V
Forward continuous Current	I_F	200	mA
Power Dissipation	P_d	225	mW
Junction temperature	T_j	-55to +125	°C
Storage temperature range	T_{stg}	-65to +150	°C

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=10\mu A$	30			V
MMSD301 MMSD701			70			
Forward voltage	V_F	$I_F=1.0mA$		0.38	0.45	V
MMSD301		$I_F=10mA$		0.52	0.6	
		MMSD701	$I_F=1.0mA$		0.42	
		$I_F=10mA$		0.7	1.0	
Reverse current	I_R	$V_R=25V$		13	200	nA
MMSD301 MMSD701		$V_R=35V$		9.0	200	nA
Diode Capacitance	C_d	$V_R=0V, f=1MHz$		0.9	1.5	pF
MMSD301 MMSD701				0.5	1.0	

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Figure 1. Total Capacitance

Figure 2. Minority Carrier Lifetime

Figure 3. Reverse Leakage

Figure 4. Forward Voltage

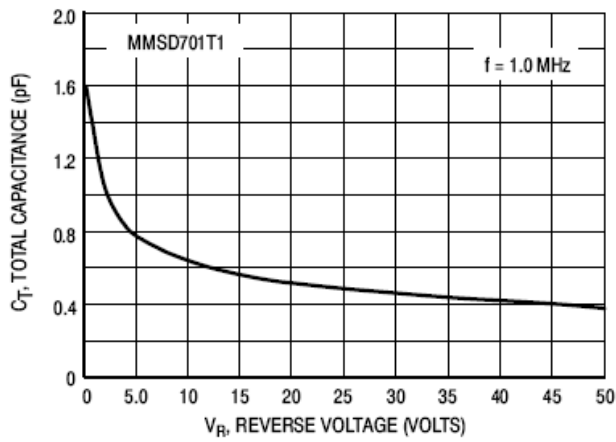


Figure 5. Total Capacitance

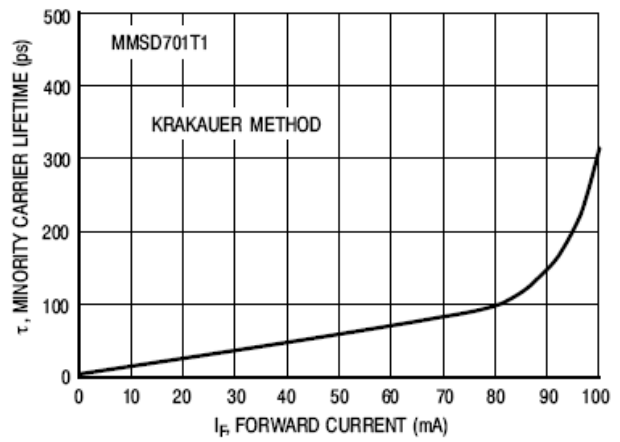


Figure 6. Minority Carrier Lifetime

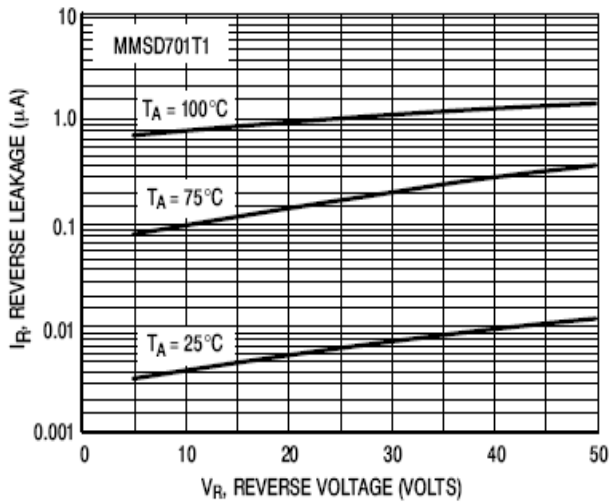


Figure 7. Reverse Leakage

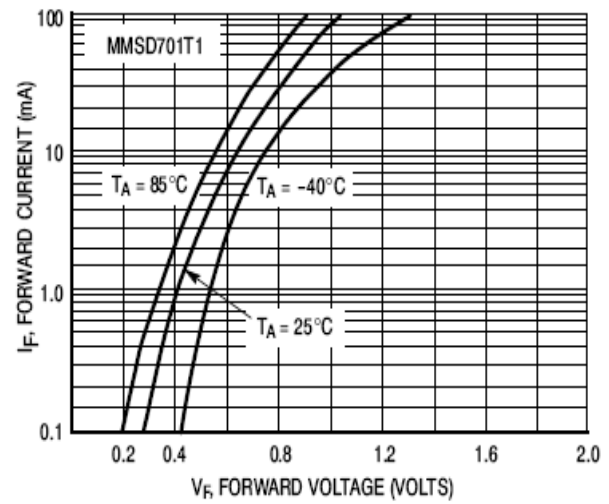


Figure 8. Forward Voltage