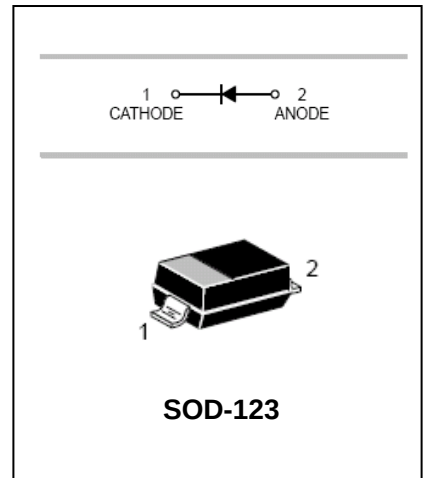


Schottky Barrier Diode**MMSD301/MMSD701****FEATURES**

- 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	V
MMSD301 MMSD701		70	
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

Schottky Barrier Diode

MMSD301/MMSD701

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=10\mu A$	30 70			V
MMSD301 MMSD701						
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	0.5	
		$I_F=10mA$		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 @ $T_a=25^\circ C$ unless otherwise specified

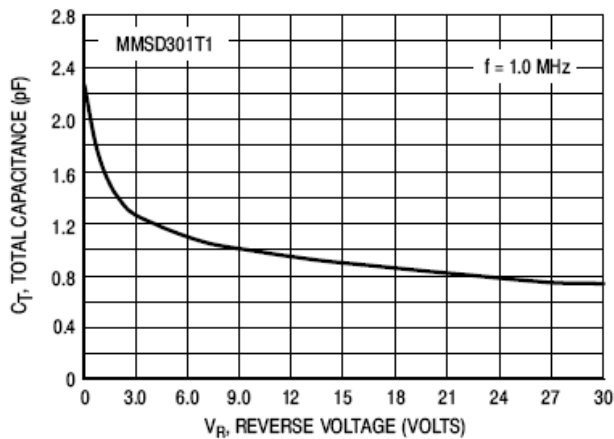


Figure 1. Total Capacitance

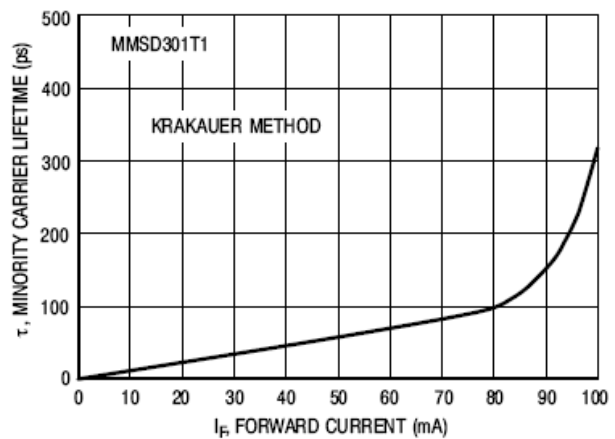


Figure 2. Minority Carrier Lifetime

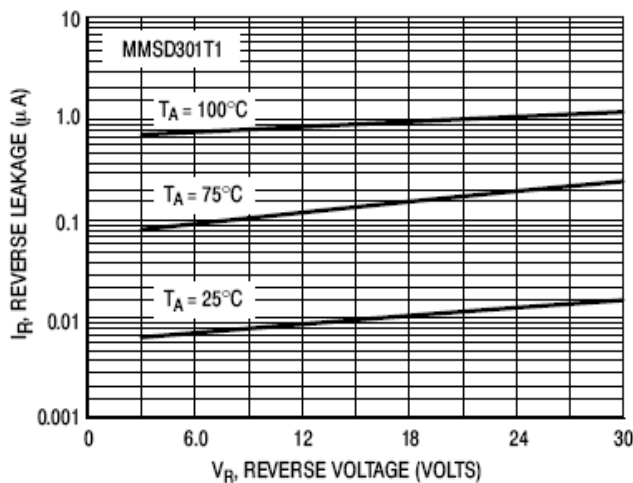


Figure 3. Reverse Leakage

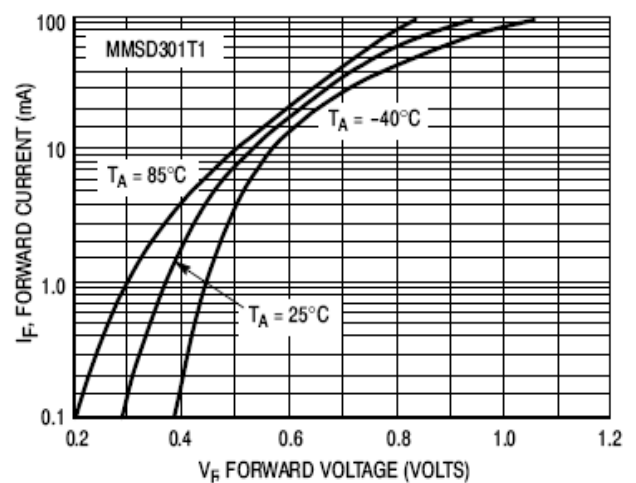


Figure 4. Forward Voltage

Schottky Barrier Diode

MMSD301/MMSD701

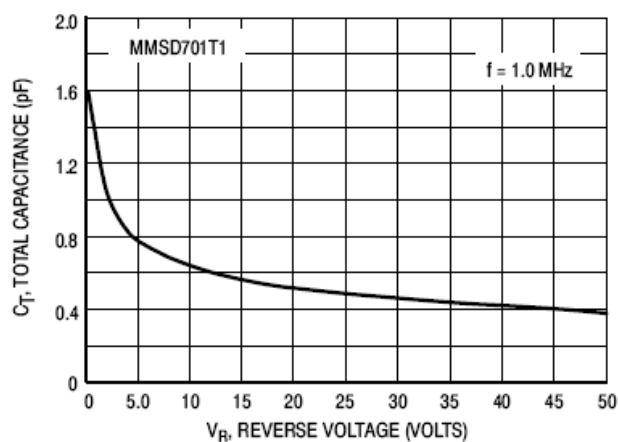


Figure 5. Total Capacitance

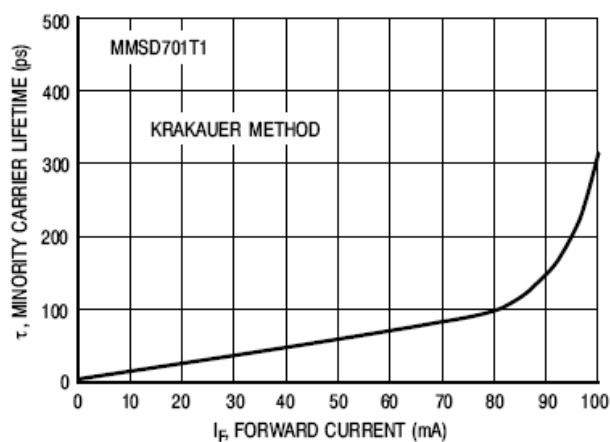


Figure 6. Minority Carrier Lifetime

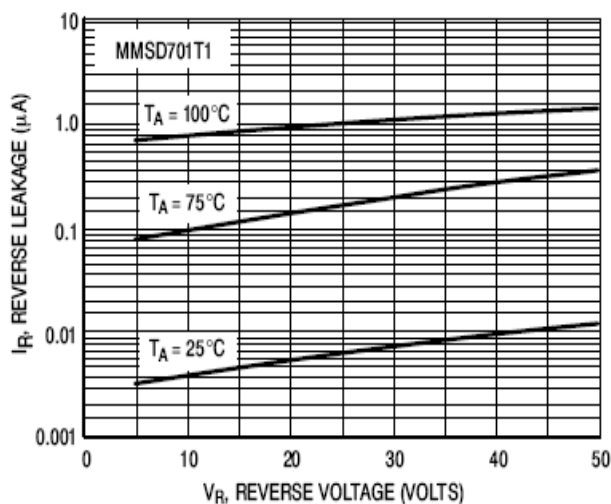


Figure 7. Reverse Leakage

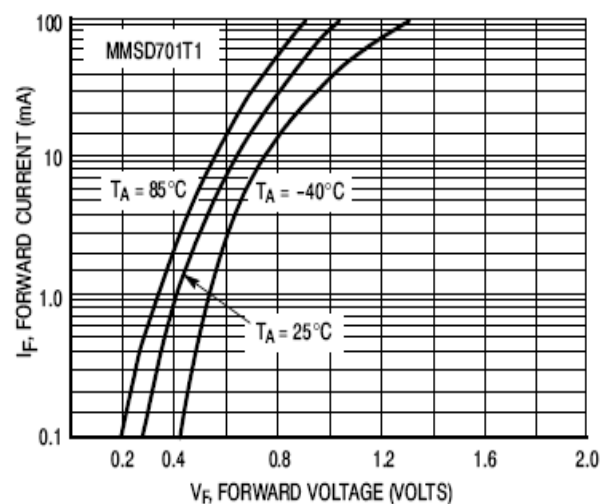


Figure 8. Forward Voltage

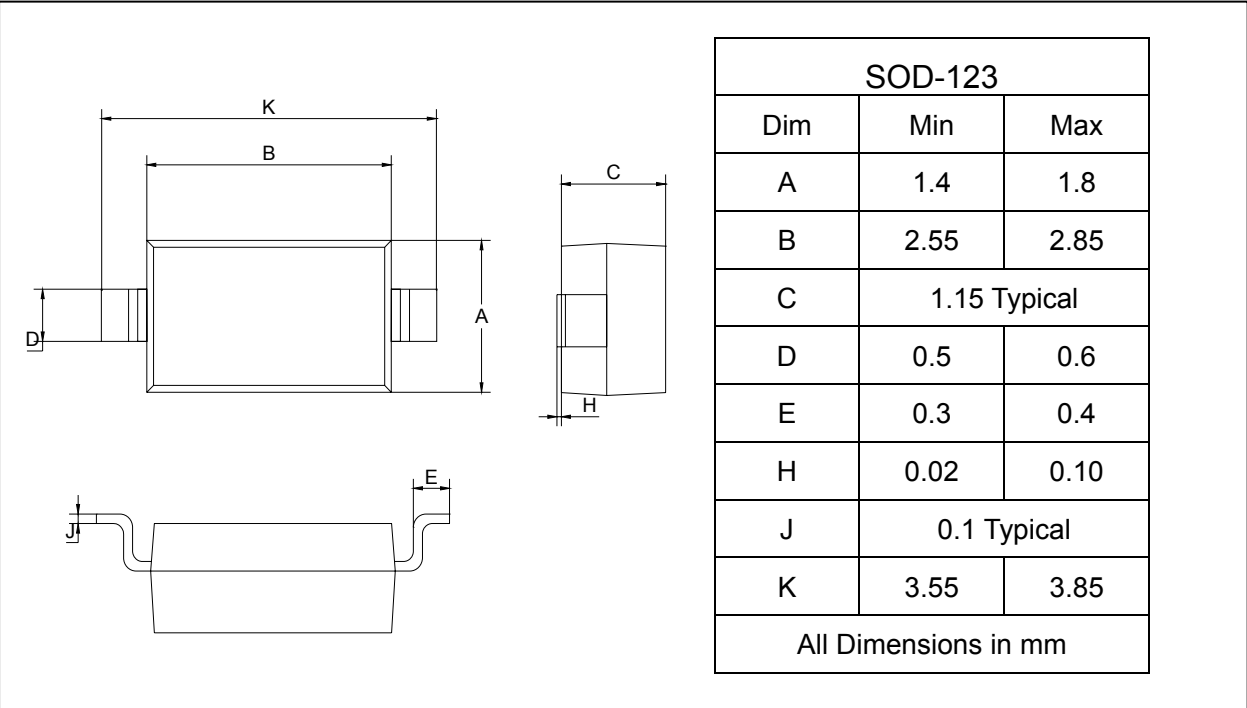
Schottky Barrier Diode

MMSD301/MMSD701

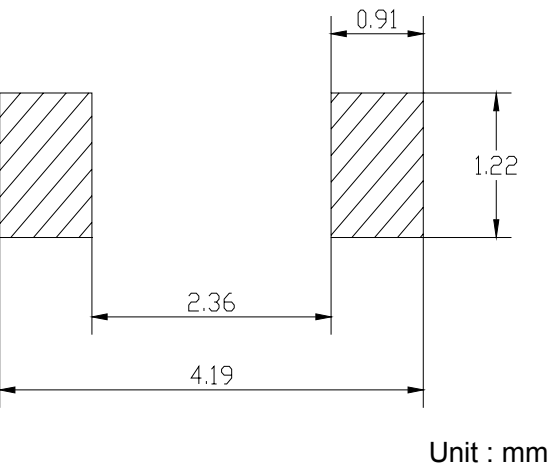
PACKAGE OUTLINE

Plastic surface mounted package

SOD-123



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
MMSD301/MMSD701	SOD-123	3000/Tape&Reel