

Schottky Barrier Diode

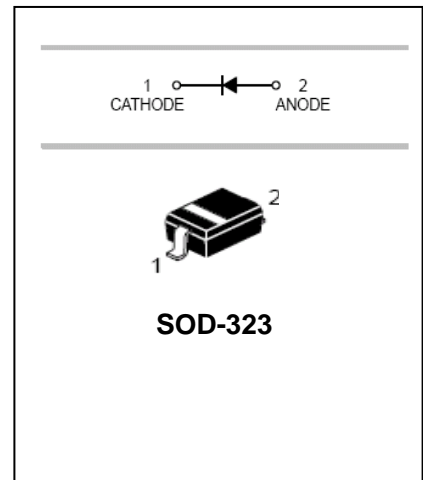
MMDL101

FEATURES

- Low noise figure—6.0dB Typ.@1.0GHz.
- Very Low Capacitance—less than 1.0pF @0V.
- Ultra-small surface mount package.
- PN junction guard ring for transient and ESD protection.



Lead-free



APPLICATIONS

- For high-efficiency UHF and VHF detector applications.

ORDERING INFORMATION

Type No.	Marking	Package Code
MMDL101	4M	SOD-323

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	Limits	Unit
DC reverse voltage	V_R	7.0	V
Power Dissipation	P_d	200	mW
Thermal resistance, junction to ambient air	$R_{\theta JA}$	635	°C/W
Junction temperature	T_j	150	°C
Storage temperature range	T_{stg}	-65-150	°C

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=10\mu A$	7.0	10		V
Forward voltage	V_F	$I_F=10mA$		0.5	0.6	V
Reverse leakage current	I_R	$V_R=3.0V$		20	250	nA
Noise Figure	NF	$f=1.0GHz$		6.0		dB
Total capacitance	C_T	$V_R=0V, f=1.0MHz$		0.88	1.0	pF

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TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

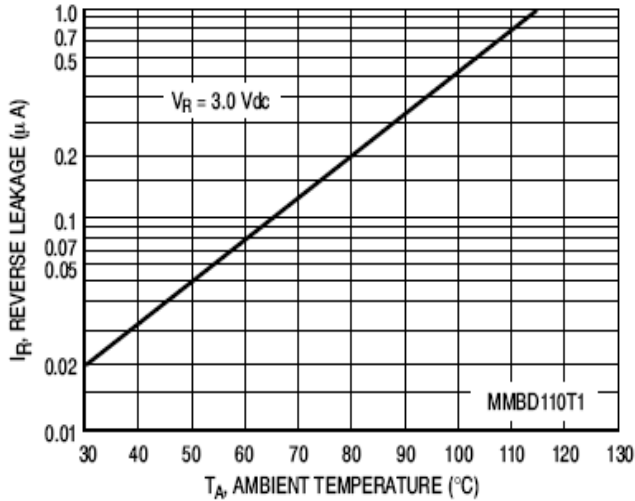


Figure 1. Reverse Leakage

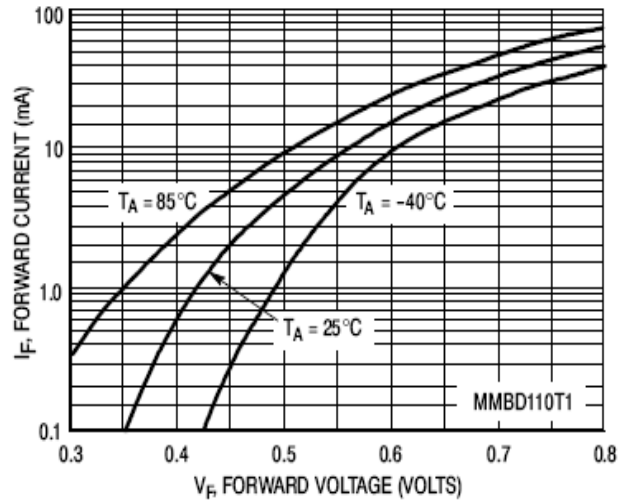


Figure 2. Forward Voltage

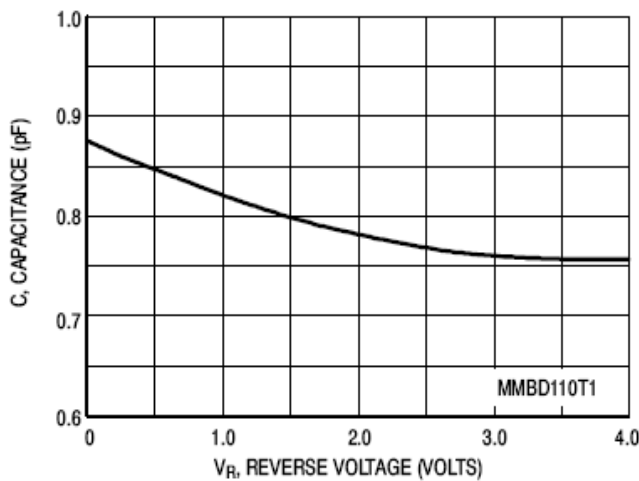


Figure 3. Capacitance

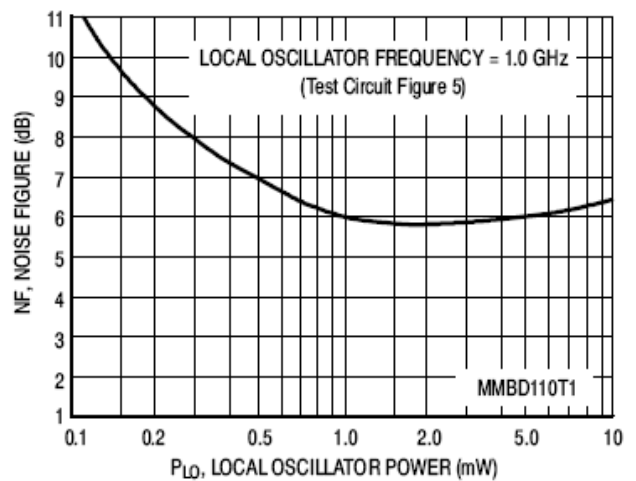


Figure 4. Noise Figure

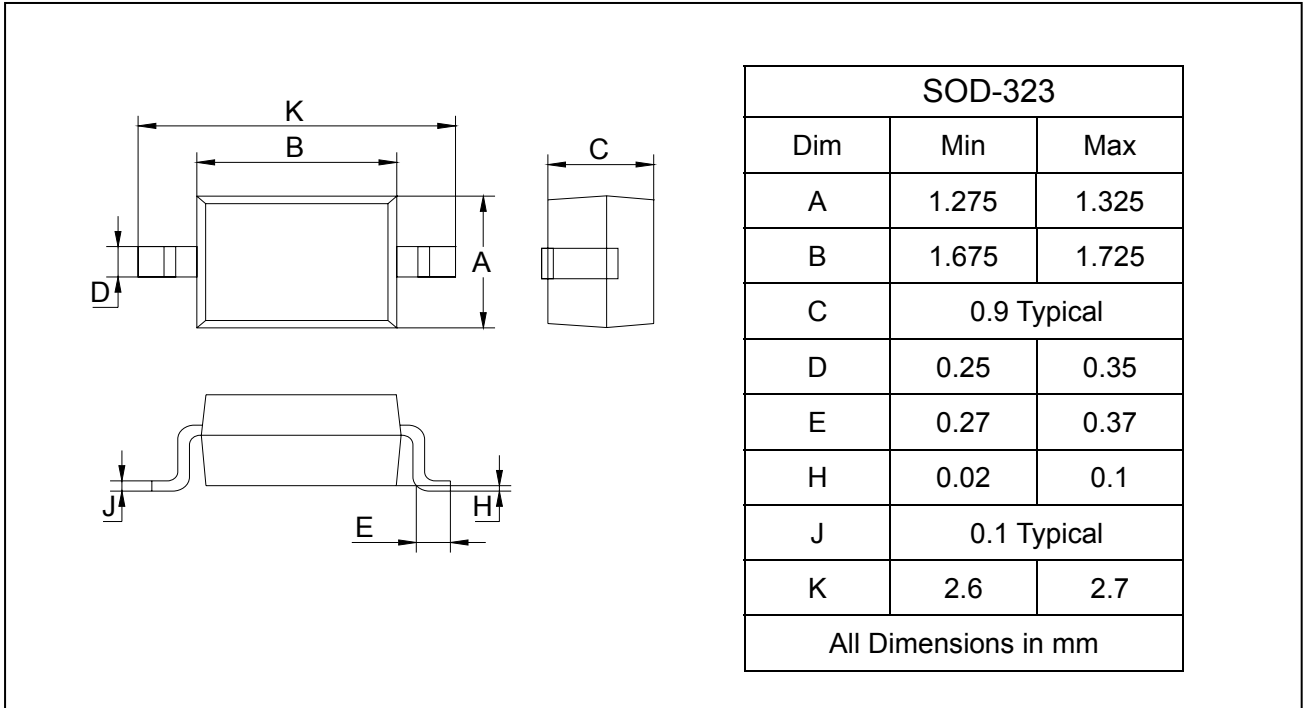
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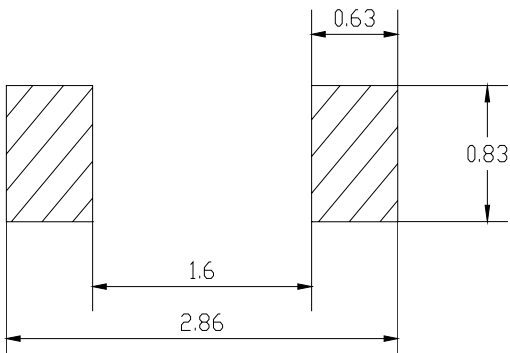
PACKAGE OUTLINE

Plastic surface mounted package

SOD-323



SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
MMDL101	SOD-323	3000/Tape&Reel