



SMP1320W

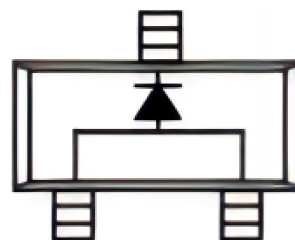
Features

- Small plastic SMD package
- Low diode capacitance
- Low diode forward resistance
- Small inductance

Marking:RLB

Applications

- General RF applications



Maximum Ratings

SOT-323

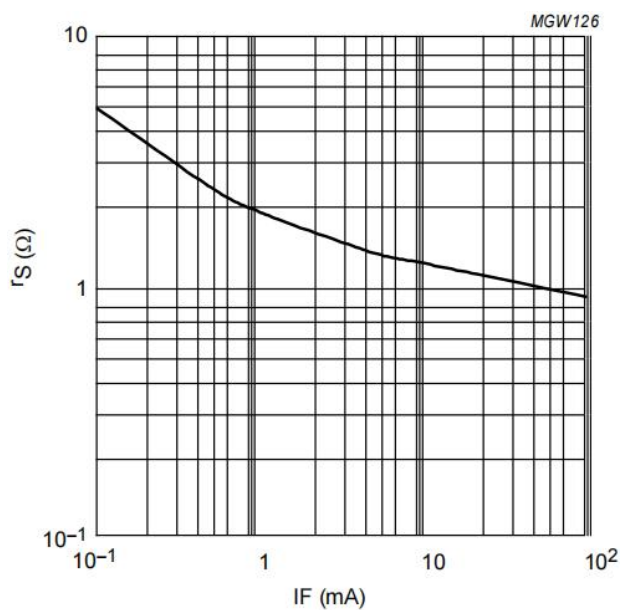
Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	V_R	50	V
Continuous Forward Current	I_F	80	mA
Total Power Dissipation@ $T_S=90^{\circ}\text{C}$	P_{tot}	400	mW
Storage Temperature Range	T_{STG}	$-55\sim+150$	$^{\circ}\text{C}$
Operating Junction Temperature	T_J	$-55\sim+150$	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=10\text{mA}$	-	0.85	1	V
Reverse Current	I_R	$V_R=50\text{V}$	-	-	2	μA
Diode Capacitance	C_d	$V_R=30\text{V}, f=1\text{MHz}$	-	0.23	0.3	pF
Diode Forward Resistance	r_s	$I_F=1\text{mA}, f=100\text{MHz}$	-	2	-	Ω
		$I_F=10\text{mA}, f=100\text{MHz}$	-	-	0.9	Ω
Series Inductance	L_S		-	2	-	nH

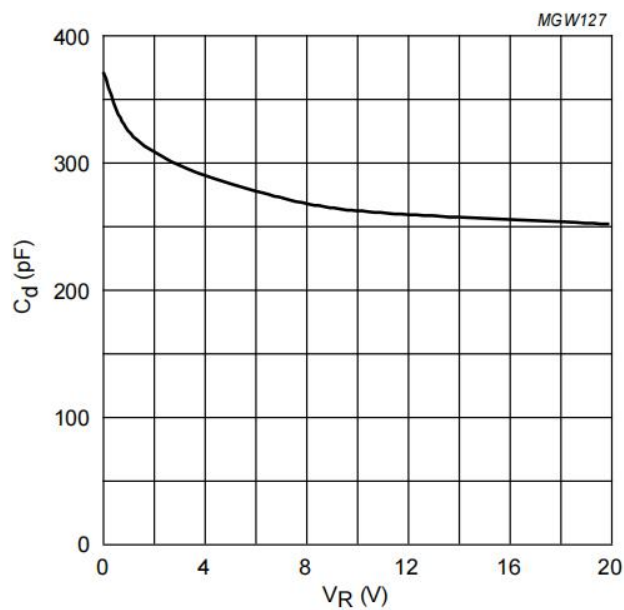


Typical Characteristics



$f = 100$ MHz; $T_j = 25$ °C.

Fig.1 Forward resistance as a function of forward current; typical values.



$f = 1$ MHz; $T_j = 25$ °C.

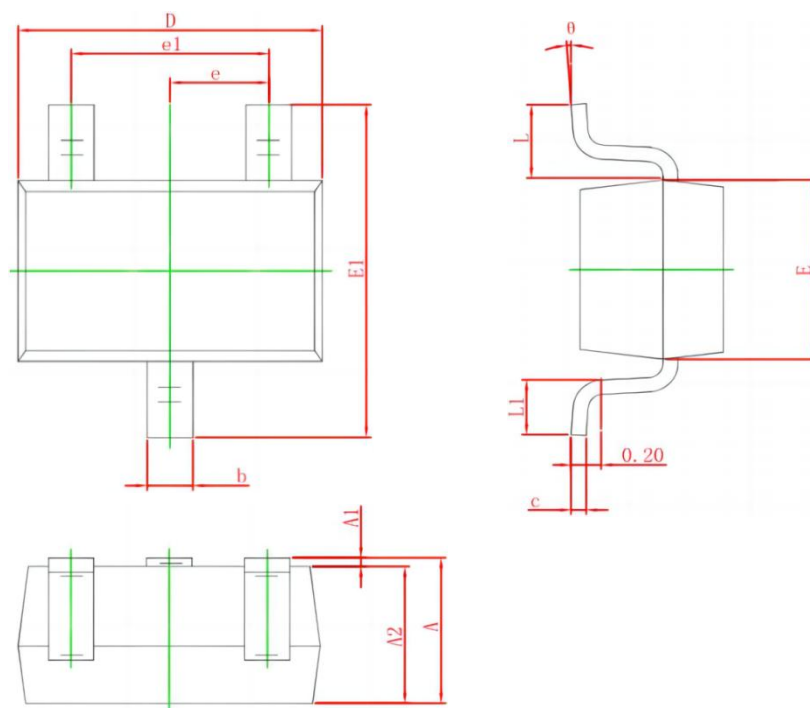
Fig.2 Diode capacitance as a function of reverse voltage; typical values.



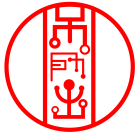
Package Information

SOT-323

Dimensions in mm



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP.		0.026 TYP.	
e1	1.200	1.400	0.047	0.055
L	0.525 REF.		0.021 REF.	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°



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