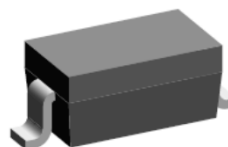


Small Signal Product

Switching Diode

FEATURES

- Surface Mounted Device
- Fast Switching Speed
- Moisture sensitivity level (MSL): 1
- Pb free and RoHS compliant


SOD-323


MECHANICAL DATA

- Case: Bend lead SOD-323 package
- High temperature soldering guaranteed: 260°C/10s
- Weight: 4.5mg (approximately)
- Marking: T4

APPLICATION

General purpose switching application

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Peak reverse voltage	V _{RM}	100	V
DC blocking voltage	V _R	75	V
Non-repetitive peak forward current	I _{FM}	300	mA
Average rectified output current	I _O	150	mA
Peak forward surge current @t=1μs	I _{FSM}	2.0	A
Power dissipation	P _D	200	mW
Junction temperature	T _J	150	°C
Storage temperature	T _{STG}	- 55 to +150	°C

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Forward voltage	V _{F1}	I _F = 1mA			0.715	V
	V _{F2}	I _F = 10mA			0.885	V
	V _{F3}	I _F = 50mA			1	V
	V _{F4}	I _F = 150mA			1.25	V
Reverse leakage current	I _{R1}	V _R =75V			1	μA
	I _{R2}	V _R =20V			25	nA
Capacitance between terminals	C _T	V _R =0V, f=1MHz			2	pF
Reverse recovery time	t _{rr}	I _F =I _R =10mA, I _{rr} =0.1 · I _R , R _L =100Ω			4.0	ns

Small Signal Product

RATINGS AND CHARACTERISTICS CURVES

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

Fig. 1 Typical Reverse Characteristics

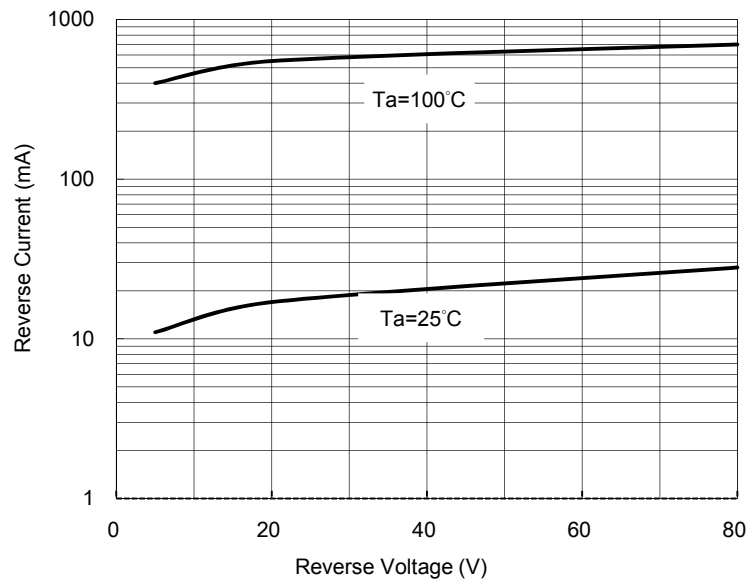


Fig.2 Typical Forward Characteristics

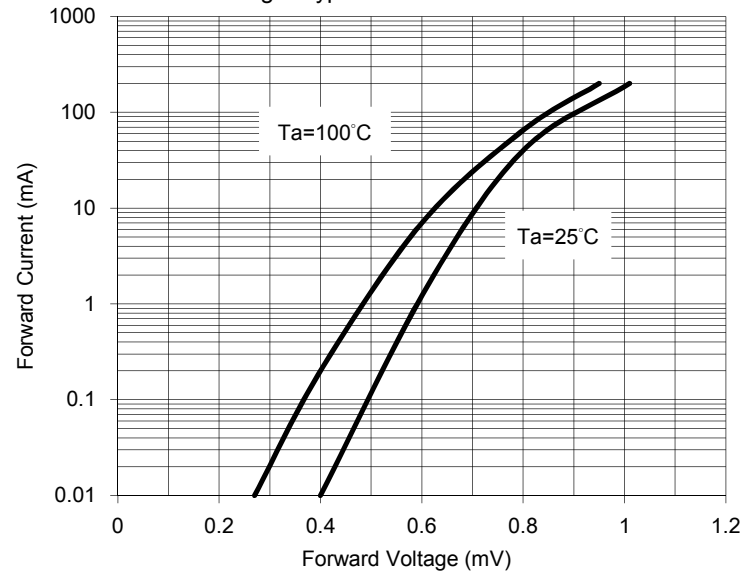


Fig. 3 Power Derating Curve

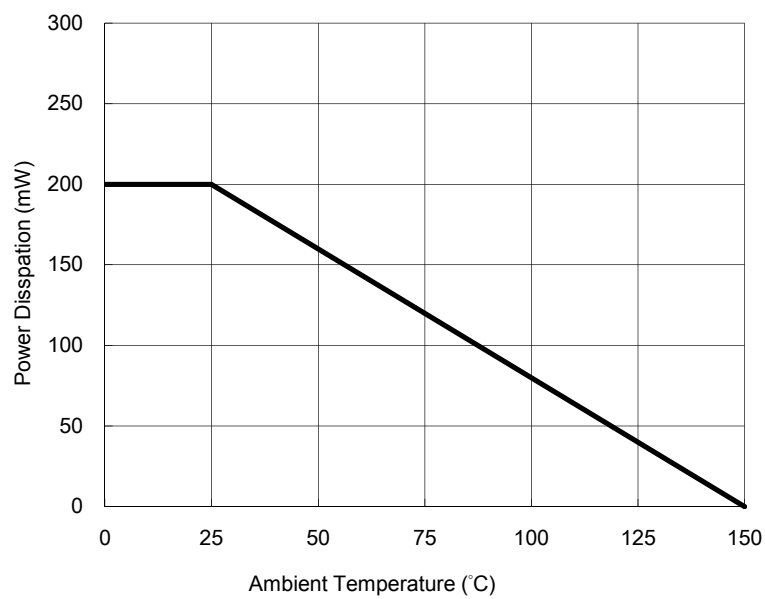
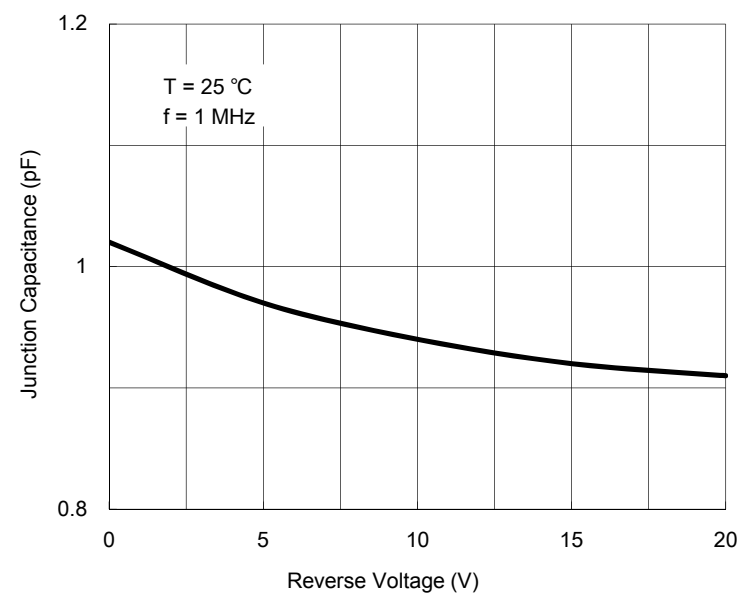


Fig. 4 Typical Capacitance Characteristics



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ORDERING INFORMATION					
PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
1N4148WS-G	-xx (Note 1)	RV	G	SOD-323	3K / 7" Reel

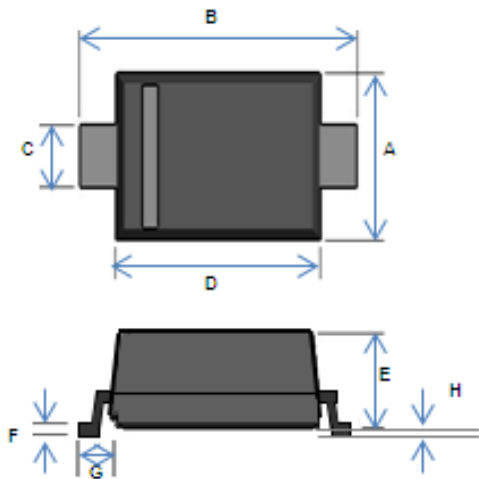
Note 1: Part No. Suffix „-xx “ would be used for special requirement

EXAMPLE					
PREFERRED PART NO.	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
1N4148WS-G RVG	1N4148WS-G		RV	G	Multiple manufacturer sources, Green compound
1N4148WS-G-N0 RVG	1N4148WS-G	-N0	RV	G	Defined manufacturer source, Green compound

Small Signal Product

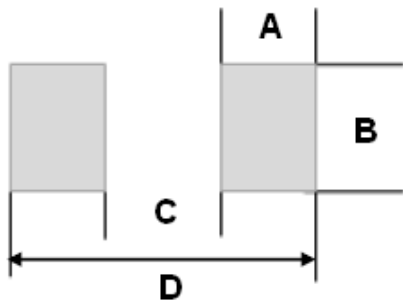
PACKAGE OUTLINE DIMENSIONS

SOD-323



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	1.15	1.40	0.045	0.055
B	2.30	2.70	0.091	0.106
C	0.25	0.45	0.010	0.018
D	1.60	1.80	0.063	0.071
E	0.80	1.00	0.031	0.039
F	0.05	0.17	0.002	0.007
G	0.475 REF		0.19 REF	
H	-	0.10	-	0.004

SUGGESTED PAD LAYOUT



DIM.	Unit (mm)	Unit (inch)
	Typ.	Typ.
A	0.63	0.025
B	0.83	0.033
C	1.60	0.063
D	2.86	0.113

Small Signal Product

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