

# **Switching Diode**

#### **FEATURES**

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







#### **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

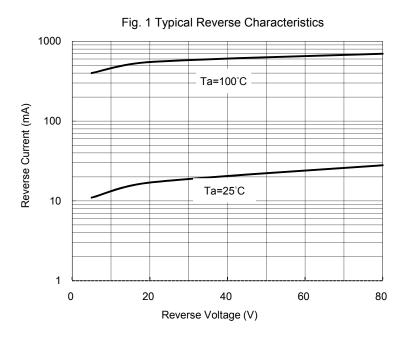
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)				
PARAMETER	SYMBOL	VALUE	UNIT	
Peak reverse voltage	V <sub>RM</sub>	100	V	
DC blocking voltage	V <sub>R</sub>	75	V	
Non-repettive peak forward current	I <sub>FM</sub>	300	mA	
Average rectified output current	I <sub>O</sub>	150	mA	
Peak forward surge current @t=1µs	I <sub>FSM</sub>	2.0	А	
Power dissipation	P <sub>D</sub>	200	mW	
Junction temperature	T <sub>J</sub>	150	°C	
Storage temperature	T <sub>STG</sub>	- 55 to +150	°C	

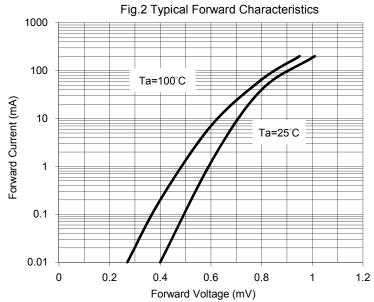
PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
	V <sub>F1</sub>	I <sub>F</sub> = 1mA			0.715	V
Forward voltage	$V_{F2}$	I <sub>F</sub> = 10mA			0.885	V
Forward voltage	V <sub>F3</sub>	I <sub>F</sub> = 50mA			1	V
	V <sub>F4</sub>	I <sub>F</sub> = 150mA			1.25	V
Deverse leakage surrent	I <sub>R1</sub>	V <sub>R</sub> =75V			1	μΑ
Reverse leakage current	I <sub>R2</sub>	V <sub>R</sub> =20V			25	nA
Capacitance between terminals	C <sub>T</sub>	V <sub>R</sub> =0V , f=1MHz			2	pF
Reverse recovery time	t <sub>rr</sub>	$I_F = I_R = 10 \text{mA}, I_{rr} = 0.1 \cdot I_R,$ $R_L = 100 \Omega$			4.0	ns

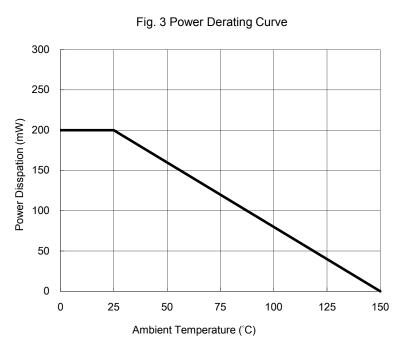


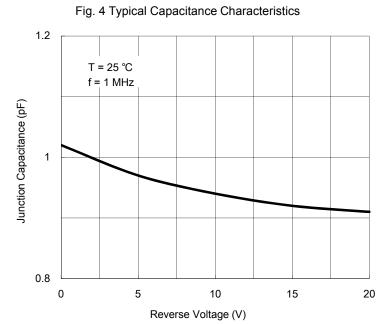
### **RATINGS AND CHARACTERISTICS CURVES**

(T<sub>A</sub>=25°C unless otherwise noted)









Version: B14



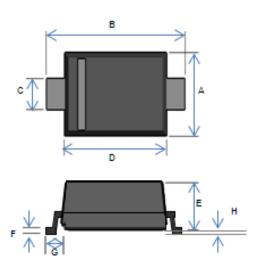
ORDERING	ORDERING INFORMATION				
PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
1N4148WS-G	-xx (Note 1)	RV	G	SOD-323	3K / 7" Reel

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

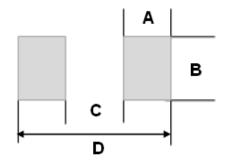


### PACKAGE OUTLINE DIMENSIONS SOD-323



DIM.	Unit	(mm)	Unit (inch)		
DIIVI.	Min	Max	Min	Max	
Α	1.15	1.40	0.045	0.055	
В	2.30	2.70	0.091	0.106	
С	0.25	0.45	0.010	0.018	
D	1.60	1.80	0.063	0.071	
Е	0.80	1.00	0.031	0.039	
F	0.05	0.17	0.002	0.007	
G	0.475 REF		0.19	REF	
Н	-	0.10	-	0.004	

### **SUGGESTED PAD LAYOUT**



DIM.	Unit (mm)	Unit (inch)	
DIWI.	Тур.	Тур.	
Α	0.63	0.025	
В	0.83	0.033	
С	1.60	0.063	
D	2.86	0.113	







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TR