

Small Signal Product

**Low VF SMD Schottky Barrier Diode**

FEATURES

- Low power loss, high current capability, low VF
- Surface mount device type
- Moisture sensitivity level (MSL): 1
- Packing code with suffix "G" means green compound (halogen-free)



SOD-323F



MECHANICAL DATA

- Case: Flat lead SOD-323F small outline plastic package
- Terminal: Matte tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- High temperature soldering guaranteed : 260°C/10s
- Polarity: Indicated by cathode band
- Weight: 4.85 ± 0.5 mg
- Marking Code: S9

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation	P <sub>D</sub>	200	mW
Peak Reverse Voltage	V <sub>RM</sub>	45	V
Reverse Voltage	V <sub>R</sub>	40	V
Mean Forward Current	I <sub>O</sub>	0.1	A
Non-Repetitive Peak Forward Surge Current	I <sub>FSM</sub>	1.0	A
Thermal Resistance (Junction to Ambient)	R <sub>θJA</sub>	500	°C/W
Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-40 to +125	°C

PARAMETER	SYMBOL	MIN	MAX	UNIT
Reverse Breakdown Voltage	V <sub>(BR)</sub>	45	-	V
Forward Voltage	V <sub>F</sub>	-	0.45	V
Reverse Leakage Current	I <sub>R</sub>	-	1	μA
Junction Capacitance	C <sub>J</sub>	-	6.0	pF

Note: Valid provided that electrodes are kept at ambient temperature.

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RATINGS AND CHARACTERISTICS CURVES

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

Fig. 1 Forward Current Derating Curve

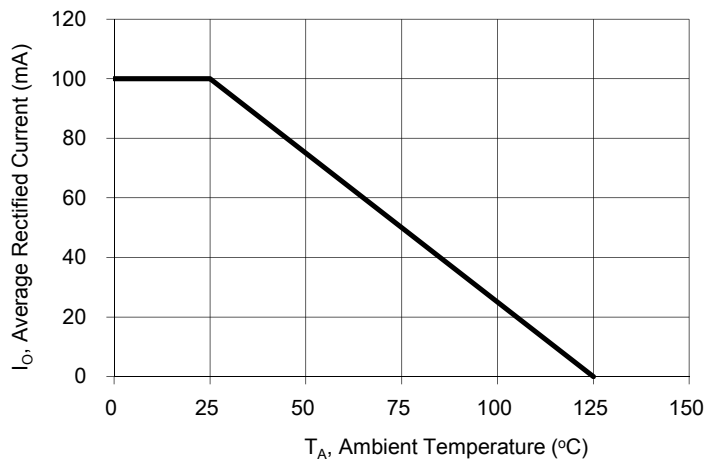


Fig. 2 Typical Forward Characteristics

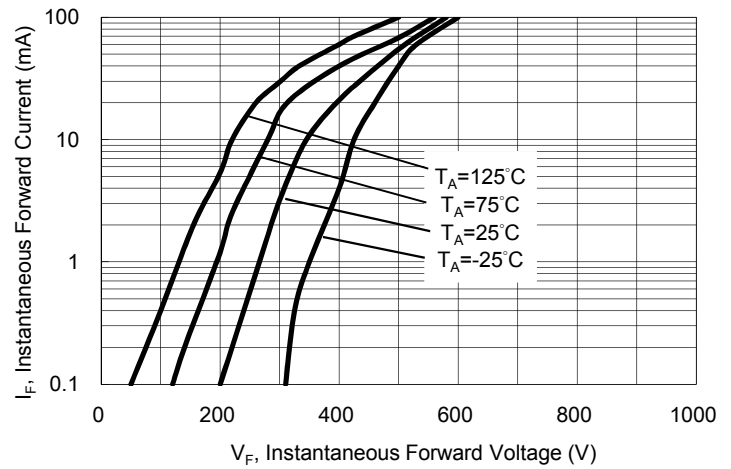


Fig. 3 Typical Reverse Characteristics

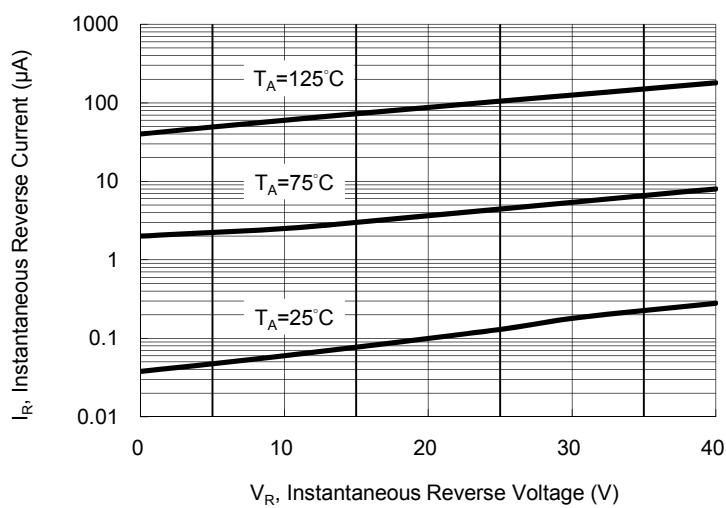
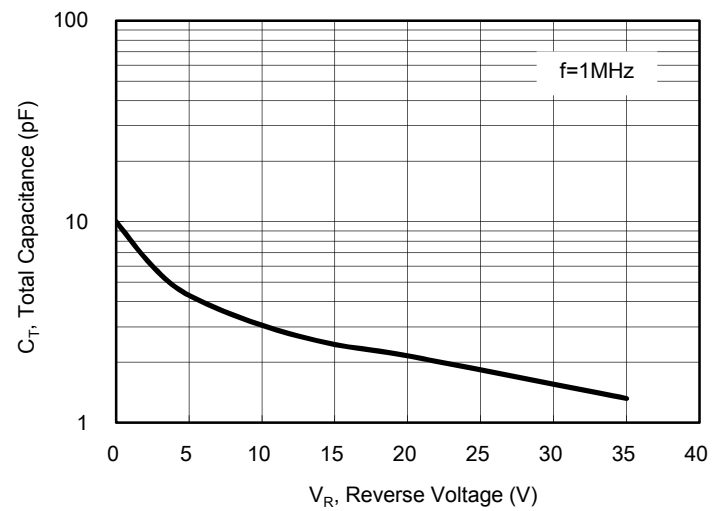


Fig. 4 Total Capacitance VS. Reverse



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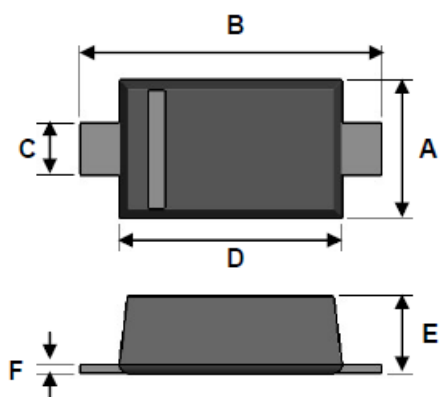
ORDERING INFORMATION					
PART NO.	PART NO. SUFFIX (Note 1)	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
RB500V-40	-xx	RR	G	SOD-323F	3,000 / 7" Reel
		R9			10,000 / 13" Reel

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

EXAMPLE					
PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
RB500V-40 RR	RB500V-40		RR		Multiple manufacture source
RB500V-40 RRG	RB500V-40		RR	G	Multiple manufacture source Green compound
RB500V-40-B0 RRG	RB500V-40	-B0	RR	G	Defined manufacture source Green compound

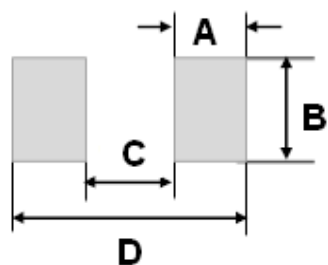
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PACKAGE OUTLINE DIMENSIONS



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	1.15	1.35	0.045	0.053
B	2.30	2.80	0.091	0.110
C	0.25	0.40	0.010	0.016
D	1.60	1.80	0.063	0.071
E	0.80	1.10	0.031	0.043
F	0.05	0.25	0.002	0.010

SUGGEST 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

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