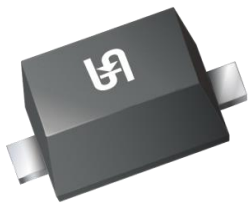
Small Signal Product

200mW High-Speed Switching SMD Diode

FEATURES

- Fast switching device (trr<4.0ns)
- Surface mount device type
- Moisture sensitivity level 1
- Matte Tin (Sn) lead finish
- Pb free version and RoHS compliant
- 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: 4.6 ± 0.5 mg
- Marking Code: W2

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation	P_D	200	mW
Average Forward Current	I_O	250	mA
Non-Repetitive Peak Forward Surge Current Pulse Width = 1 μs	I_{FRM}	4.0	A
Pulse Width = 1 ms		1.0	
Operating Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{STG}	-65 to + 150	°C

PARAMETER		SYMBOL	MIN	MAX	UNIT
Reverse Breakdown Voltage	I_R = 100 μA	$V_{(BR)}$	100	-	V
Forward Voltage	I_F = 1.0 mA	V_F	-	0.715	V
	I_F = 10 mA		-	0.855	
	I_F = 50 mA		-	1.000	
	I_F = 150 mA		-	1.250	
Reverse Leakage Voltage	V_R = 75 V	I_R	-	1	μA
	V_R = 25 V			0.03	
Junction Capacitance	V_R = 0 , f = 1.0 MHz	C_J	-	1.5	pF
Reverse Recovery Time	$I_F = I_R$ = 10 mA , I_{rr} = 0.1 × I_R	t_{rr}	-	4.0	ns

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

Fig. 1 Typical Forward Characteristics

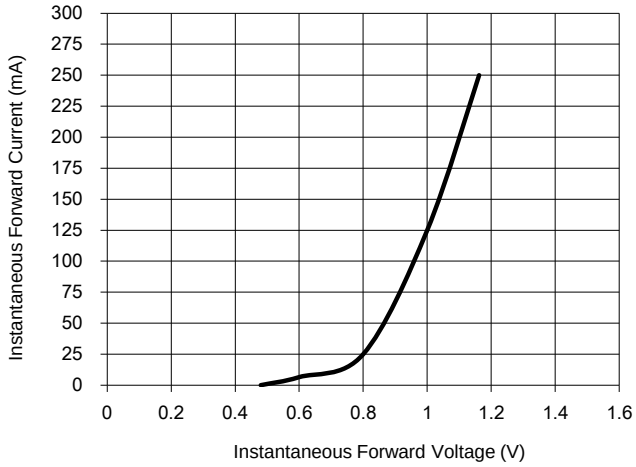


Fig. 2 Reverse Current As A Function of Junction Temperature

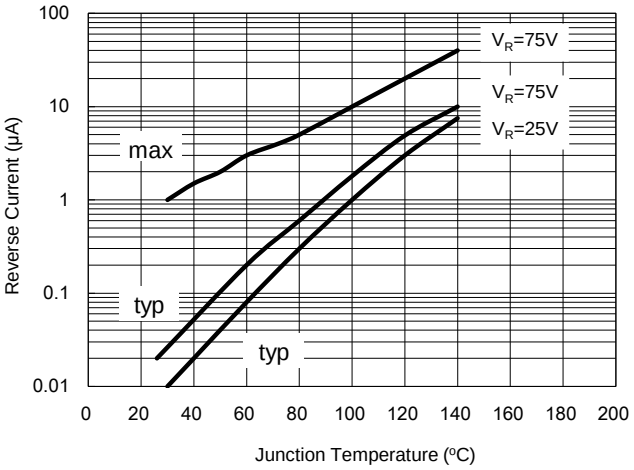


Fig. 3 Admissible Power Dissipation Curve

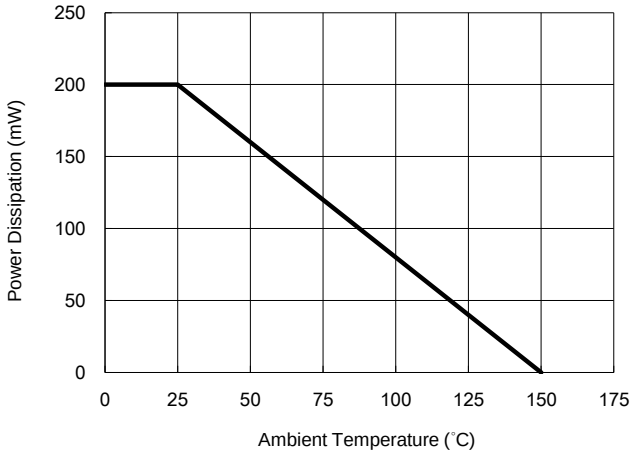
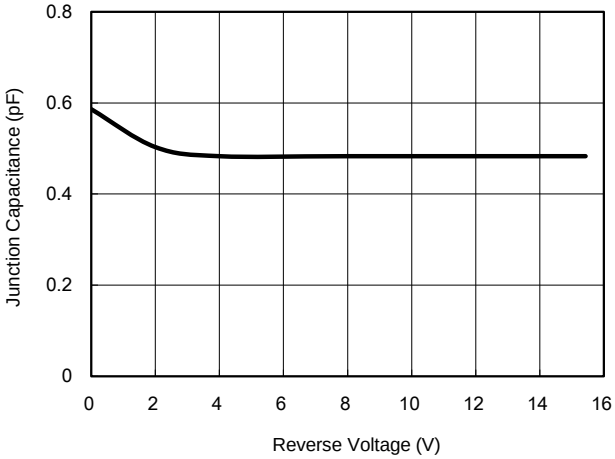


Fig. 4 Typical Junction Capacitance



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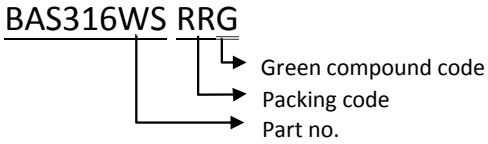
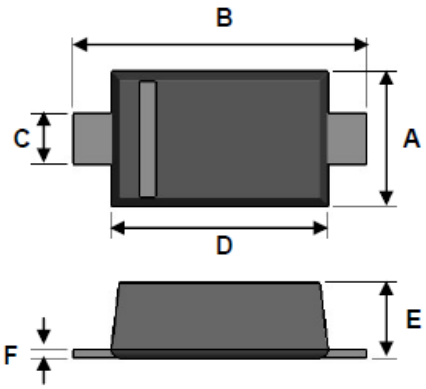
ORDER INFORMATION (EXAMPLE)



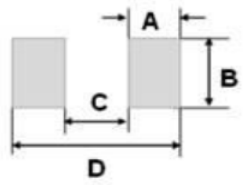
DIMENSIONS

SOD-323F



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

SUGGESTED PAD LAYOUT



DIM.	Unit(mm)	Unit(inch)
	Typ.	Typ.
A	0.630	0.025
B	0.830	0.033
C	1.600	0.063
D	2.860	0.113

Note: 1. The suggested land pattern dimensions have been provided for refernece only, as actual pad layouts may vary depending on application.

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