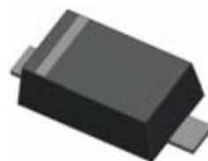


Small Signal Product

200mW, SMD High Speed Switching Diode

FEATURES

- Fast switching device ($t_{rr} < 4.0$ ns)
- Surface mount device type
- Moisture sensitivity level 1
- Matte Tin(Sn) lead finish
- Pb free and RoHS compliant
- Green compound (Halogen free) with suffix "G" on packing code and prefix "G" on date code



SOD-523F



MECHANICAL DATA

- Case: Flat lead SOD-523F 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: 1.68 ± 0.5mg
- Marking code: A



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)			
PARAMETER	SYMBOL	LIMIT	UNIT
Power Dissipation	P _D	200	mW
Repetitive Peak Reverse Voltage	V _{RRM}	100	V
Reverse Voltage	V _R	100	V
Mean Forward Current	I _O	200	mA
Peak Forward Surge Current	I _{FSM}	500	mA
Thermal Resistance (Junction to Ambient)	RθJA	625	°C/W
Storage Temperature Range	T _J , T _{STG}	-55 to + 150	°C

PARAMETER	SYMBOL	MIN	TYP	MAX	TEST CONDITION	UNIT
Breakdown Voltage	V _(BR)	100		-	I _R = 100 μA	V
Forward Voltage	V _F	-		1.2	I _F = 100 mA	V
Reverse Leakage Current	I _R	-		0.1	V _R = 80 V	μA
Reverse Recovery Time	t _{rr}			4	I _F = 10 mA , V _R = 6 V, R _L = 100 Ω	nS
Junction Capacitance	C _J	-		4	V _R = 0.5 V , f = 1.0 MHz	pF

Small Signal Product

RATINGS AND CHARACTERISTICS CURVES (1SS400)

(TA=25°C unless otherwise noted)

Fig. 1 Total Capacitance

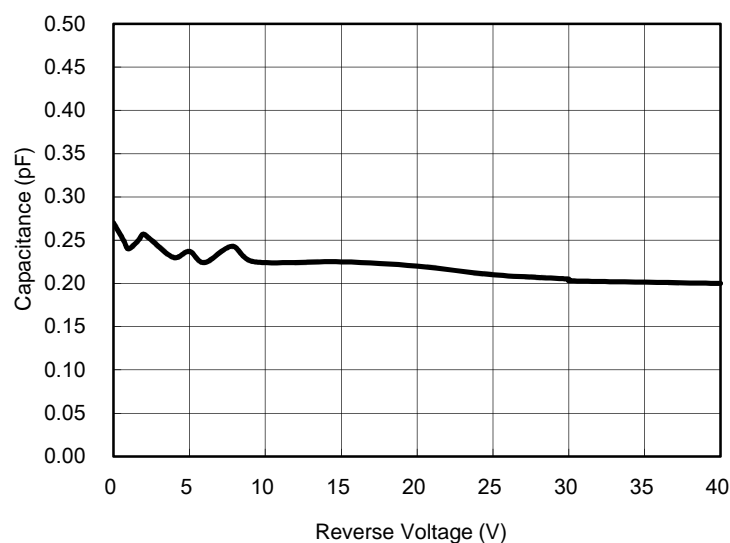


Fig. 2 Forward Voltage VS. Ambient Forward Current

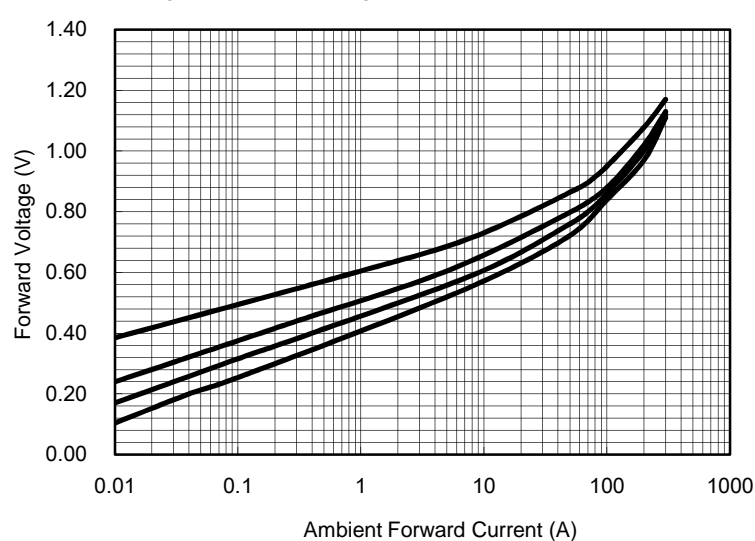


Fig. 3 Power Derating Curve

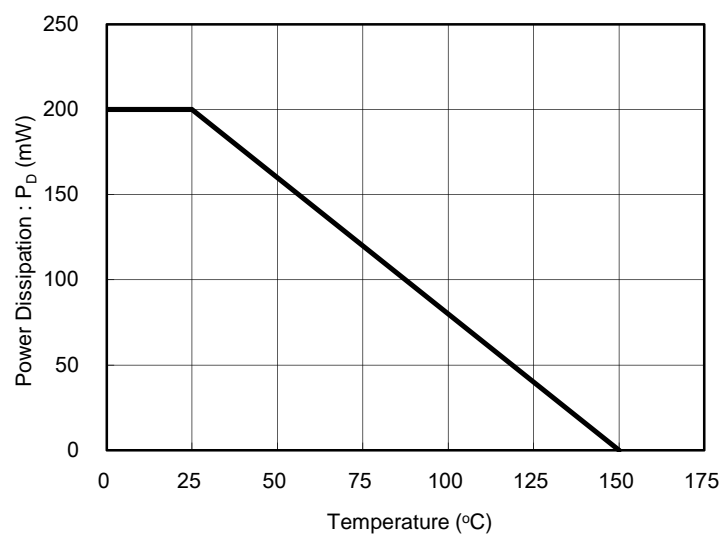
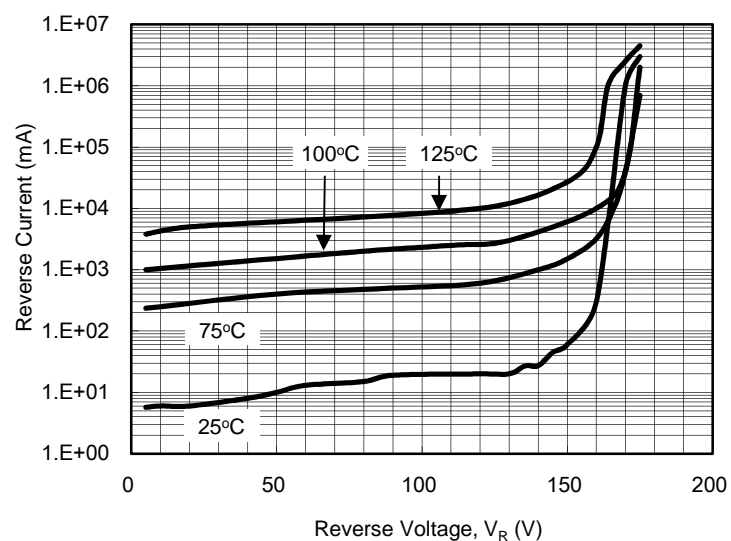


Fig. 4 Reverse Current VS. Reverse Voltage



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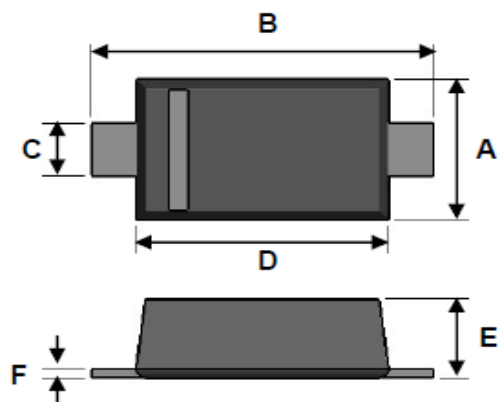
ORDERING INFORMATION						
PART NO.	MANUFACTURE CODE (Note)	PACKING CODE	GREEN COMPOUND	PACKAGE	PACKING	MARKING
1SS400		RK	G	SOD-523F	3K / 7" Reel	A
1SS400		RS	G	SOD-523F	8K / 7" Reel	A

Note: Manufacture special control, if empty means no special control requirement.

EXAMPLE					
PREFERRED P/N	PART NO.	MANUFACTURE CODE	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
1SS400 RKG	1SS400		RK	G	Green compound
1SS400-L0 RKG	1SS400	L0	RK	G	Green compound
1SS400-B0 RKG	1SS400	B0	RK	G	Green compound

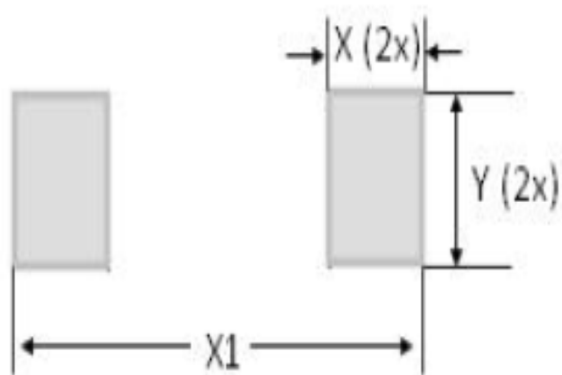
Small Signal Product

DIMENSIONS
SOT-523F



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	0.70	0.90	0.028	0.035
B	1.50	1.70	0.059	0.067
C	0.25	0.40	0.010	0.016
D	1.10	1.30	0.043	0.051
E	0.50	0.77	0.020	0.030
F	0.07	0.20	0.003	0.008

SUGGESTED PAD LAYOUT



DIM.	Unit (mm)	Unit (inch)
	Typ.	Typ.
X	0.60	0.024
X1	2.30	0.091
Y	0.80	0.031

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