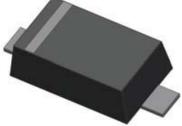




# **Small-Signal Fast Switching Diodes**





#### **Features**

- V<sub>R</sub> 80V
- lo 100mA

### **Typical Applications**

• Extreme fast switches

#### **Mechanical Data**

- Package: SOD-523
- Terminals: Tin plated leads, solderable per
- J-STD-002 and JESD22-B102
- Polarity: Cathode line denotes the cathode end
- Marking: A

# ■Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	$V_{RRM}$	V		90
Reverse voltage	V <sub>R</sub>	V	I <sub>R</sub> =100uA	80
Non-Repetitive Peak forward surge current	I <sub>FSM</sub>	А	8.3ms@half-sine	2
Forward continuous current	I <sub>FM</sub>	mA		225
Average rectified output current	lo	mA		100
Power dissipation	P <sub>D</sub>	mW		150
Junction temperature	T <sub>j</sub>	$^{\circ}$		-55 to +150
Storage temperature range	T <sub>stg</sub>	$^{\circ}$		-55 to +150

## ■Electrical Characteristics (Ta=25°C Unless otherwise specified)

Electrical orial acteristics (1a-23 or oriness otherwise specified)							
PARAMETER	Symbol	UNIT Conditions		Min	Max		
Breakdown Voltage	V <sub>R</sub> V I <sub>R</sub> =100uA		I <sub>R</sub> =100uA	80			
Forward Voltage	V <sub>F</sub>	V <sub>F</sub> V         I <sub>F</sub> =100mA           I <sub>R</sub> uA         V <sub>R</sub> =80V			1.2		
Reverse Leakage Current	I <sub>R</sub>				0.1		
Diode Capacitance	C <sub>D</sub>	pF	V <sub>R</sub> =0.5V,f=1MHz		3		
Reverse Recovery Time	T <sub>RR</sub>	ns	V <sub>R</sub> =6V , I <sub>F</sub> =10mA , R <sub>L</sub> =100 W		4		

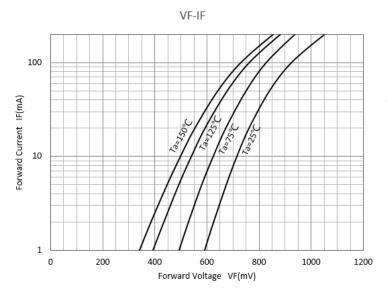
**■**Ordering Information (Example)

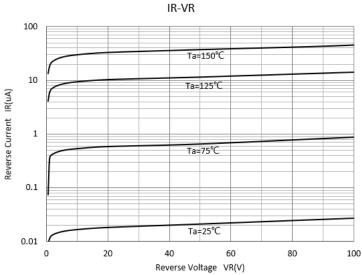
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
1SS400	F2	Approximate 0.002	8000	80000	320000	7" reel

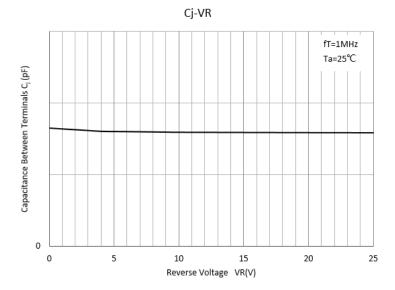




# **■** Characteristics (Typical)

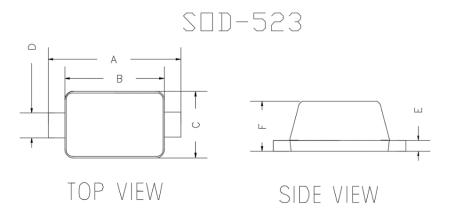






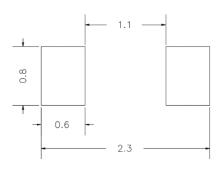


## **■ Outline Dimensions**



DIMENSIONS					
DIM	INCHES		ММ		
	MIN	MAX	MN	MAX	
Α	0.059	0.067	1.500	1.700	
В	0.043	0.051	1.100	1.300	
С	0.028	0.035	0.700	0.900	
D	0.010	0.014	0.250	0.350	
Е	0.002	0.008	0.050	0.200	
F	0.020	0.028	0.500	0.700	

# ■ Soldering Footprint



UNIT: mm

SUGGESTED SOLDER PAD LAYOUT



## **1SS400**

#### **Disclaimer**

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