

# **Schottky Barrier Diode**





#### **Features**

- V<sub>R</sub> 30V
- I<sub>F</sub> 200mA

### **Typical Applications**

• Low Forward Voltage Drop

#### **Mechanical Data**

- Package: SOD523
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Cathode line denotes the cathode end
- Marking: 5B

**■Limiting Values** (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	Limit Max
Power Dissipation	P <sub>D</sub>	mW		200
Storage Temperature	T <sub>STG</sub>	$^{\circ}$		-55 to +125
Junction Temperature	ΤJ	$^{\circ}$ C		125
DC Reverse Voltage	V <sub>R</sub>	V		30
Average Rectified Forward Current	I <sub>FAV</sub>	mA		200

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

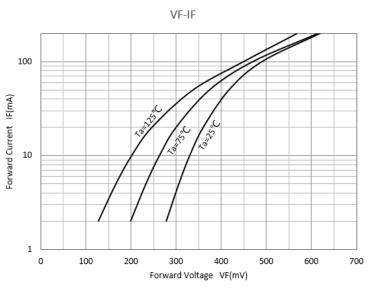
Item	Symbol	Unit	Conditions	Min	Max
Breakdown Voltage	VR	V	IR= 100uA	30	
Reverse Leakage Current	IR	uA	VR=25V		2
Forward Voltage	VF	V	IF=0.1mA		0.24
			IF=1.0mA		0.32
			IF=10mA		0.40
			IF=30mA		0.50
			IF=100mA		1.00
Reverse Recovery Time	TRR	ns	IF=IR=10mA,RL=100Ω,IRR=1mA		5
Capacitance	С	pF	VR=1V, f=1MHZ		10

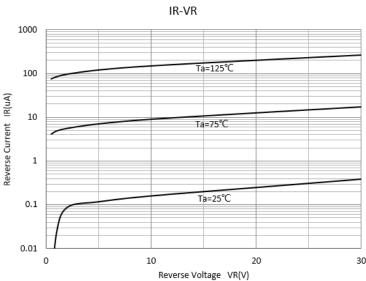


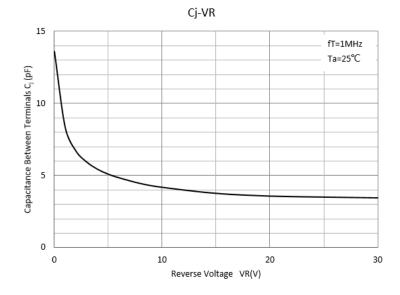
**■Ordering Information** (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAT54XV2	F2	Approximate 0.0025	8000	80000	320000	7" reel

## **■Characteristics**(Typical)

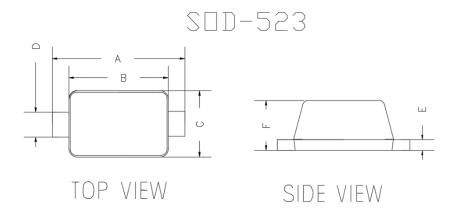






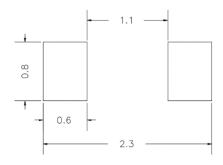


### **■ Outline Dimensions**



DIMENSIONS					
DIM	INC	HES	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	
E	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



#### **Disclaimer**

The information presented in this document is for reference only. Shanghai Sunco Electronics Co., Ltd reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Russiansunco or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website http:// <a href="http://www.russiansunco.com">www.russiansunco.com</a>, or consult your nearest Russiansunco's sales office for further assistance.