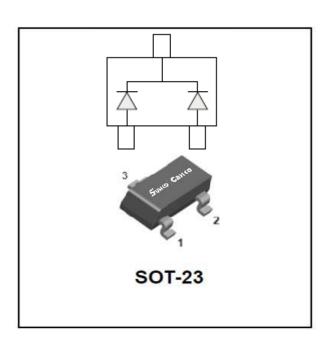


# **Dual Switching Diode**



#### **Features**

- ●Epoxy meets UL-94 V-0 flammability rating
- •Moisure Sensitivity Level 1
- •Fast switching speed
- High Conductance
- •Surface mount package ideally Suited for Automatic Insertion

#### **Mechanical Data**

- Package: SOT-23
- Terminals: Tin plated leads, solderable per
  - J-STD-002 and JESD22-B102
- Polarity: Cathode line denotes the cathode end
   Marking: A4

#### ■Maximum Rating, (T<sub>a</sub>=25°C Unless otherwise specified)

ltem	Symbol	Unit	Value
Peak Reverse Voltage	$V_{RRM}$	V	100
Reverse Voltage	$V_R$	V	75
Forward Continuous Current@f>=50Hz, Per Leg	I <sub>F</sub>	mA	150
Non-Repetitive Peak Forward Surge Current@8.3ms, Half sine-wave, Per Leg	I <sub>FSM</sub>	Α	2.0
Power Dissipation	$P_{D}$	mW	350
Maximum Thermal Resisance	R <sub>thJA</sub>	°C/W	357
Storage Temperature	T <sub>STG</sub>	°C	-55 to +150
Operating Junction Temperature	T <sub>j</sub>	°C	-55 to +150

**■Ordering Information** (Example)

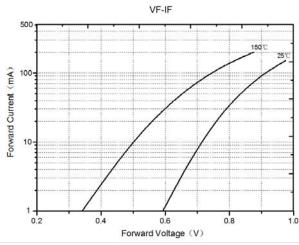
PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAV70	F2	Approximate 0.008	3000	30000	120000	7" reel

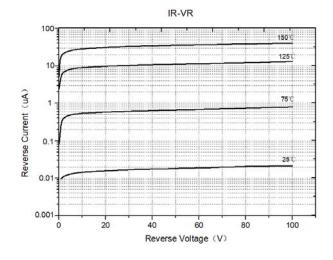


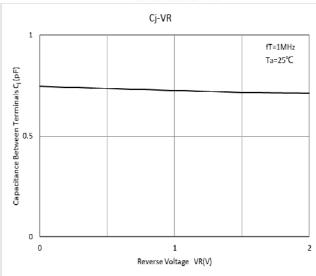
## **■Electrical Characteristics** (Ta=25°C Unless otherwise specified, Per Leg)

Item	Symbol	Unit	Conditions	Value
Reverse Voltage	V <sub>R</sub>	V	IR=2.5uA	75
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	V	I <sub>FM</sub> =1mA	0.715
		V	I <sub>FM</sub> =10mA	1
		V	I <sub>FM</sub> =50mA	1
		V	I <sub>FM</sub> =150mA	1.25
Maximum DC Reverse Current	I <sub>R</sub>	uA	V <sub>R</sub> =75V	2.5
Typical Junction Capacitance	Сл	pF	f=1.0MHz, V <sub>R</sub> =0V	4
Reverse Recovery Time	T <sub>rr</sub>	ns	$I_F = 10 \text{mA}, \ V_R = 6 \text{V}, \ R_L = 100 \Omega, \\ I_{rr} = 1 \text{mA}$	4

## ■ Typical Characteristics (Per Leg)

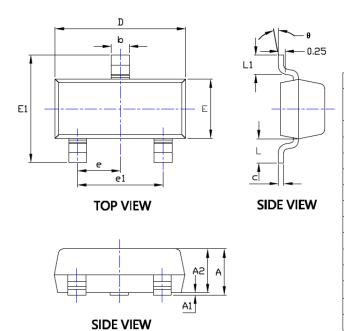






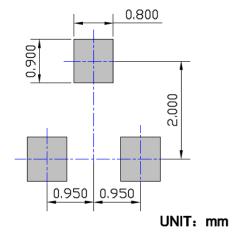


### ■SOT-23 Package Outline Dimensions



DIMENSIONS					
SYMBOL	INC	HES	Millimeter		
	MIN.	MAX.	MIN.	MAX.	
Α	0.035	0.045	0.900	1.150	
A1	0.000	0.004	0.000	0.100	
A2	0.035	0.041	0.900	1.050	
b	0.012	0.020	0.300	0.500	
C	0.004	0.008	0.100	0.200	
D	0.110	0.118	2.800	3.000	
E	0.047	0.055	1.200	1.400	
E1	0.089	0.100	2.250	2.550	
е	0.037	7TYP	0.950TYP		
e1	0.071	0.079	1.800	2.000	
L	0.022	REF	0.550REF		
L1	0.012	0.020	0.300	0.500	
θ	0°	8°	0°	8°	

## ■SOT-23 Soldering Footprint





#### **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:// www.russiansunco.com , or consult your nearest Russiansunco's sales office for further assistance.