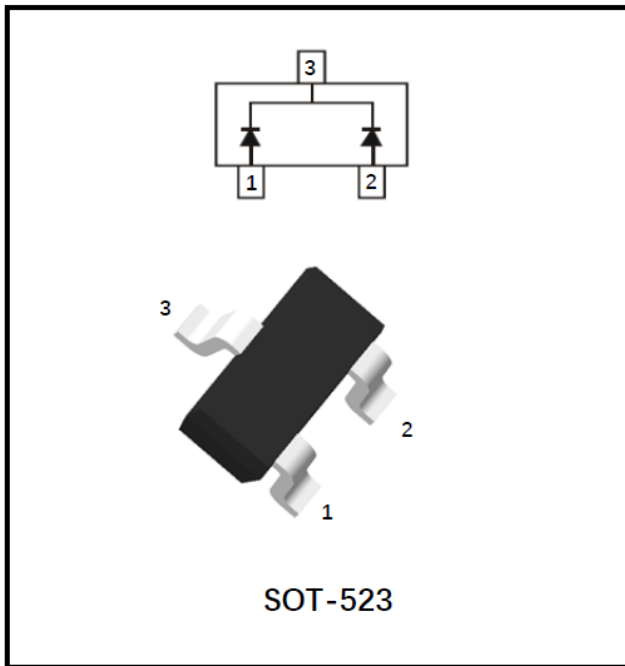


Switching Diode



Features

- Fast switching speed
- High Conductance
- Surface mount package ideally Suited for Automatic Insertion
- Epoxy meets UL-94 V-0 flammability rating, halogen-free

Mechanical Data

- **Package:** SOT-523
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:** JJ

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

Item	Symbol	Unit	Value
Reverse Voltage	V_R	V	100
Forward Continuous Current	I_F	mA	75
Non-Repetitive Peak Forward Surge Current @ t = 1ms	I_{FSM}	A	1
Power Dissipation	P_D	mW	150
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	°C/W	833
Operation Junction Temperature	T_J	°C	150
Storage Temperature	TSTG	°C	-55 to +150



BAV70T

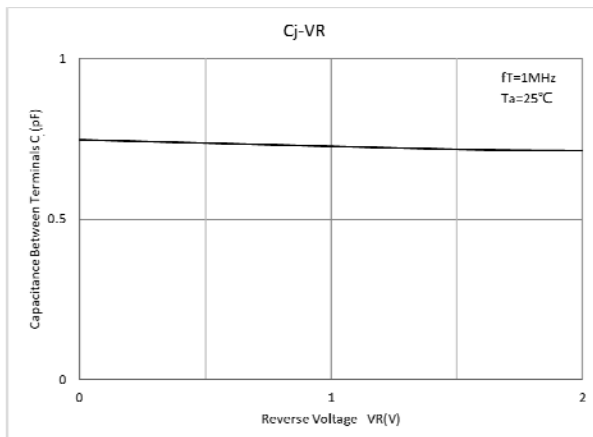
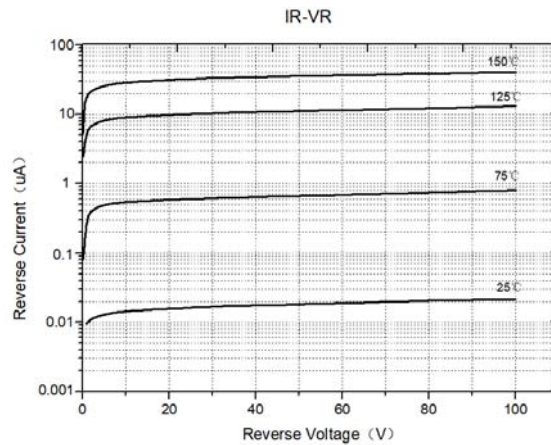
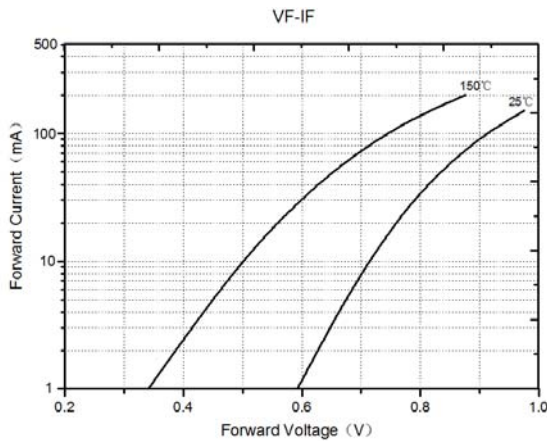
■ Electrical Characteristics (Ta=25°C unless otherwise specified)

Item	Symbol	Unit	Conditions	MIN	TYP	MAX
Reverse Voltage	V_R	V	$I_R=100\mu A$	100	-	-
Maximum Instantaneous Forward Voltage	V_F	V	$I_F=1mA$	-	-	0.715
			$I_F=10mA$	-	-	0.855
			$I_F=50mA$	-	-	1
			$I_F=150mA$	-	-	1.25
Maximum DC Reverse Current	I_R	nA	$V_R=25V$	-	-	30
		μA	$V_R=75V$	-	-	2
Typical Junction Capacitance	C_J	pF	$f=1.0MHz, V_R=0V$	-	-	1.5
Reverse Recovery Time	T_{rr}	ns	$I_F=I_R=10mA$ $I_{rr}=0.1*I_R, R_L=100\Omega$	-	-	4

■ Ordering Information (Example)

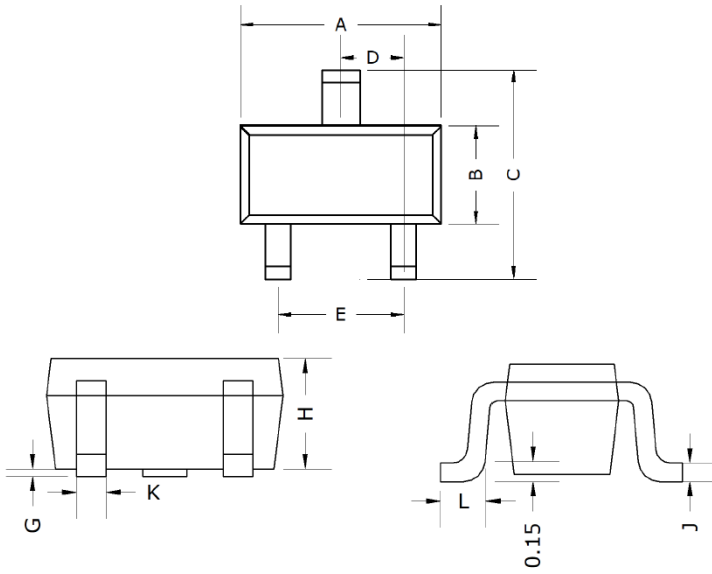
Preferred P/N	Packing Code	Unit Weight(G)	Minimum Package(Pcs)	Inner Box Quantity(Pcs)	Outer Carton Quantity(Pcs)	Delivery Mode
BAV70T	F2	Approximate 0.0027	3000	30000	120000	7" reel

■ Characteristics (Typical)



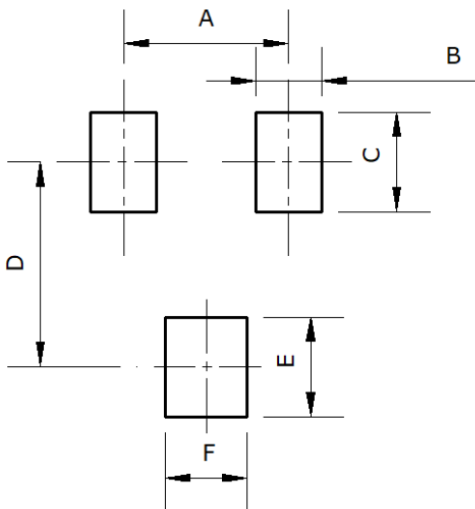


■ SOT-523 Package Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.059	0.067	1.50	1.70
B	0.030	0.033	0.75	0.85
C	0.057	0.069	1.45	1.75
D	0.020TYP		0.50TYP	
E	0.035	0.043	0.90	1.10
G	0.000	0.004	0.00	0.10
H	0.024	0.031	0.60	0.80
J	0.004	0.008	0.10	0.20
K	0.006	0.014	0.15	0.35
L	0.010	0.018	0.26	0.46

■ SOT-523 Suggested Pad Layout



DIMENSIONS	
DIM	MM (TYP)
A	1.00
B	0.40
C	0.60
D	1.24
E	0.60
F	0.50



BAV70T

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology 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 which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie 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.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.