

■ **FEATURES**

- Epoxy meets UL-94 V-0 flammability rating
- Moisture 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 RATINGS** ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Value
Peak Reverse Voltage	V_{RRM}	V	100
Reverse Voltage	V_R	V	75
Forward Continuous Current@ $f>=50\text{Hz}$, Per Leg	I_F	mA	150
Non-Repetitive Peak Forward Surge Current@8.3ms, Half sine-wave, Per Leg	I_{FSM}	A	2.0
Power Dissipation	P_D	mW	350
Maximum Thermal Resistance	R_{thJA}	$^{\circ}\text{C}/\text{W}$	357
Storage Temperature	T_{STG}	$^{\circ}\text{C}$	-55 to +150
Operating Junction Temperature	T_j	$^{\circ}\text{C}$	-55 to +150

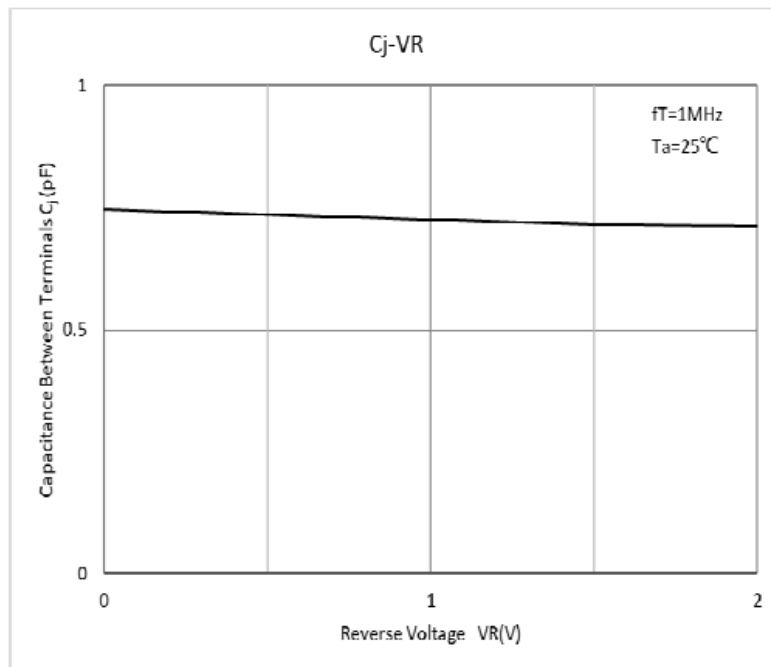
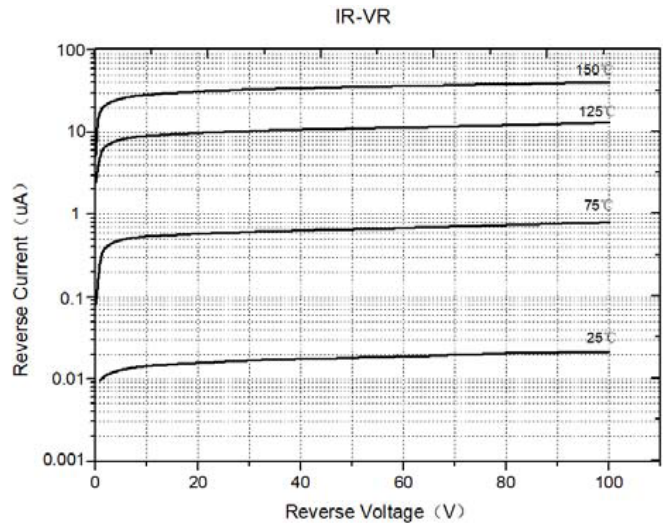
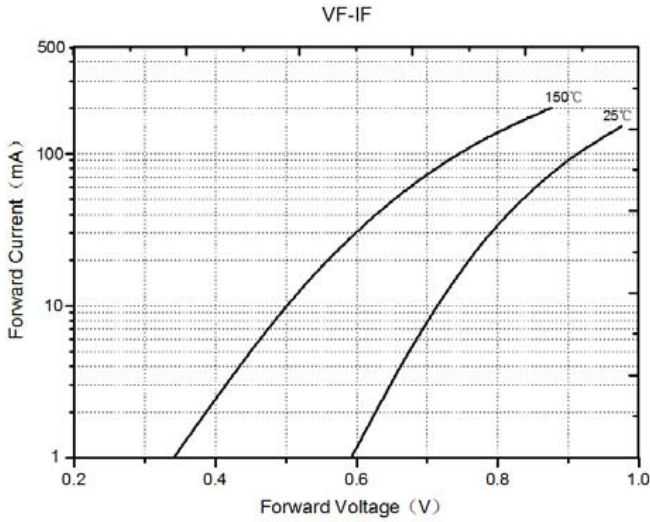
■ **ELECTRICAL CHARACTERISTICS** ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Conditions	Value
Reverse Voltage	V_R	V	$I_R=2.5\mu\text{A}$	75
Maximum Instantaneous Forward Voltage	V_F	V	$I_{FM}=10\text{mA}$	1
Maximum DC Reverse Current	I_R	μA	$V_R=75\text{V}$	2.5
Typical Junction Capacitance	C_J	pF	$f=1.0\text{MHz}$, $V_R=0\text{V}$	4
Reverse Recovery Time	T_{rr}	ns	$I_F=10\text{mA}$, $V_R=6\text{V}$, $R_L=100\Omega$, $I_{rr}=1\text{mA}$	4

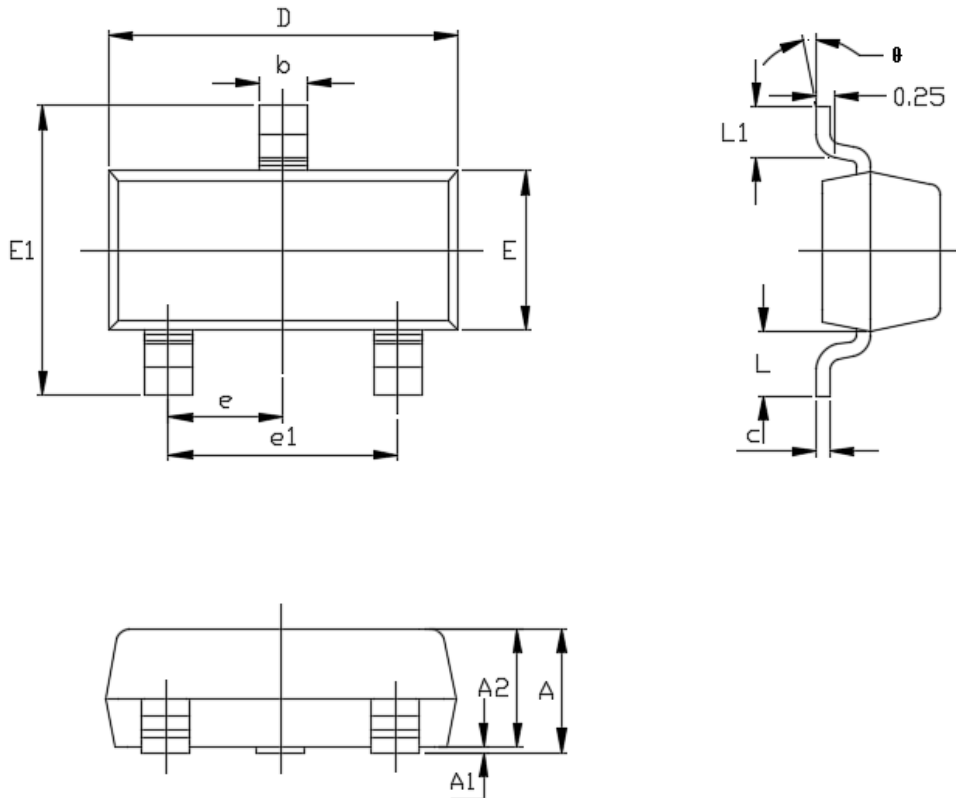
■ **PACKAGING INFORMATION**

PREFERRED 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

■ **CHARACTERISTICS (TYPICAL)**



■ **SOT-23 PACKAGE OUTLINE DIMENSIONS**



DIMENSIONS						
SYMBOL	INCHES			Millimeter		
	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.
A	0.035	---	0.045	0.900	---	1.150
A1	0.000	---	0.004	0.000	---	0.100
A2	0.035	0.038	0.041	0.900	0.975	1.050
b	0.012	0.016	0.020	0.300	0.400	0.500
c	0.004	---	0.008	0.100	---	0.200
D	0.110	0.114	0.118	2.800	2.900	3.000
E	0.047	0.051	0.055	1.200	1.300	1.400
E1	0.089	0.094	0.100	2.250	2.400	2.550
e	0.037TYP			0.950TYP		
e1	0.071	0.075	0.079	1.800	1.900	2.000
L	0.022REF			0.550REF		
L1	0.012	0.016	0.200	0.300	0.400	0.500
θ	0°	---	8°	0°	---	8°