

■ **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  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:** A1

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

Item	Symbol	Unit	Value
Reverse Voltage	$V_R$	V	100
Forward Continuous Current	$I_{FAV}$	mA	200
Non-Repetitive Peak Forward Surge Current @8.3ms, Half sine-wave, Per Leg	$I_{FSM}$	A	2.0
Power Dissipation	$P_D$	mW	350
Thermal Resistance Junction to Ambient Air	$R_{thJA}$	$^{\circ}\text{C}/\text{W}$	357
Operating Junction Temperature	$T_J$	$^{\circ}\text{C}$	-55 to +150
Storage Temperature	$T_{STG}$	$^{\circ}\text{C}$	-55 to +150

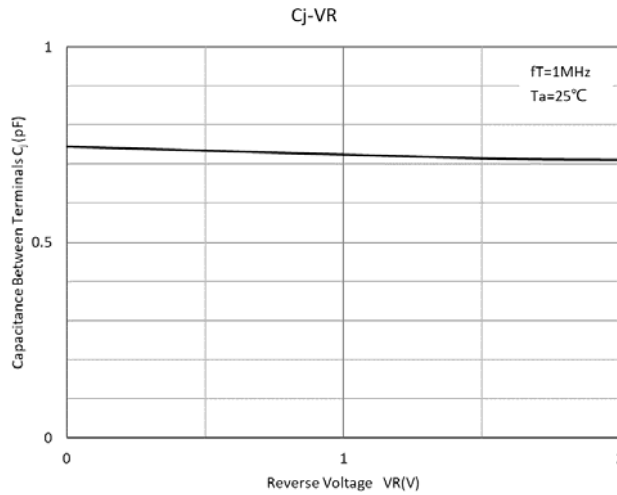
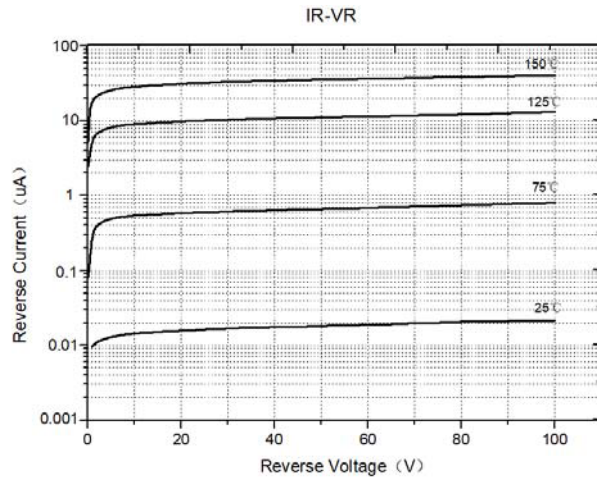
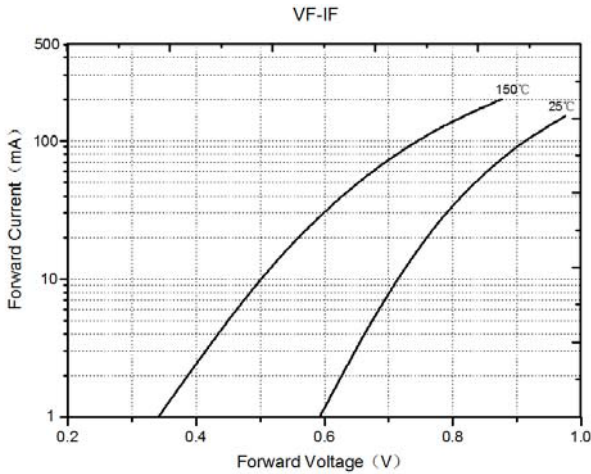
■ **ELECTRICAL CHARACTERISTICS** ( $T_a=25^{\circ}\text{C}$  Unless otherwise specified)

Item	Symbol	Unit	Conditions	Value
Reverse Voltage	$V_R$	V	$I_R=100\mu\text{A}$	100
Maximum Instantaneous Forward Voltage	$V_F$	V	$I_F=10\text{mA}, T_a=25^{\circ}\text{C}$	0.855
			$I_F=150\text{mA}, T_a=25^{\circ}\text{C}$	1.25
Maximum DC Reverse Current	$I_R$	$\mu\text{A}$	$V_R=75\text{V}$	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

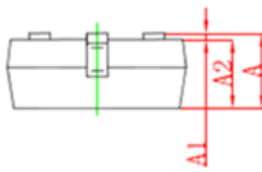
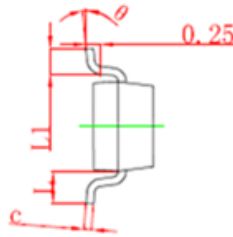
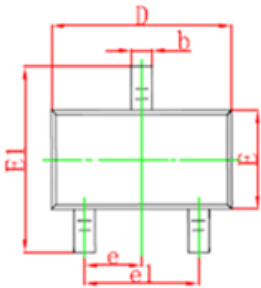
■ **PACKAGING INFORMATION**

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAW56	F2	Approximate 0.008	3000	30000	120000	7" reel

■ **CHARACTERISTICS (TYPICAL)**



■ **SOT-23 PACKAGE OUTLINE DIMENSIONS**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.100	0.200	0.004	0.008
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550REF		0.022REF	
L1	0.300	0.500	0.012	0.020
phi	0°	8°	0°	8°