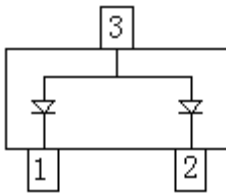


## Small-Signal Switching Diodes



**SOT-23**



### Features

- $V_R$  75V
- $I_{FAV}$  160mA

### Typical Applications

- Extreme fast switches

### Mechanical Data

- **Package:** SOT23
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:** JZ

### ■ Maximum Ratings ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	$V_{RRM}$	V		85
Reverse Voltage	$V_R$	V		75
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	A	$t=8.3\text{ms}$ , Half sine-wave	2
Average forward current	$I_{FAV}$	mA		200
Power dissipation	$P_D$	mW		225
Junction temperature	$T_j$	$^\circ\text{C}$		150
Storage temperature range	$T_{stg}$	$^\circ\text{C}$		-55 to +150

### ■ Electrical Characteristics ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

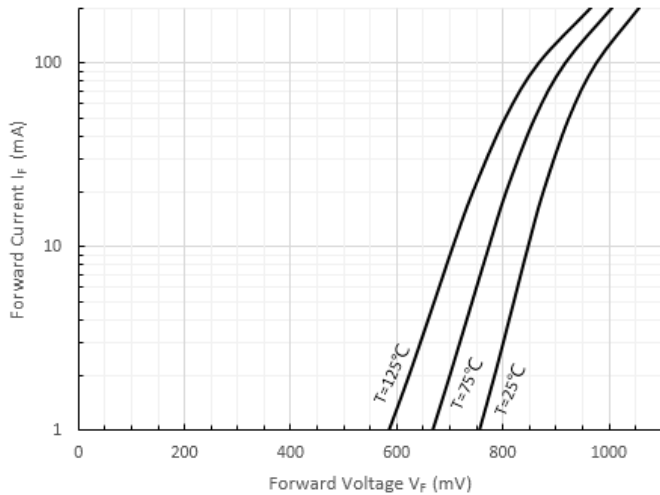
PARAMETER	SYMBOL	UNIT	Conditions	Min	Max
Maximum Forward voltage	VF	V	$I_F=1\text{mA}$		0.9
			$I_F=10\text{mA}$		1
			$I_F=50\text{mA}$		1.1
			$I_F=150\text{mA}$		1.25
Maximum Reverse current	IR	nA	$V_R=75\text{V}$		5
Minimum Breakdown voltage	$V_R$	V	$I_R=100\mu\text{A}$	75	
Maximum Diode capacitance	$C_D$	pF	$V_R=0\text{V}$ , $f=1\text{MHz}$		4
Maximum Reverse recovery time	$t_{rr}$	$\mu\text{s}$	$I_F=I_R=10\text{mA}$ , $R_L=100\Omega$ , $I_{RR}=1\text{mA}$		3

## ■ Ordering Information (Example)

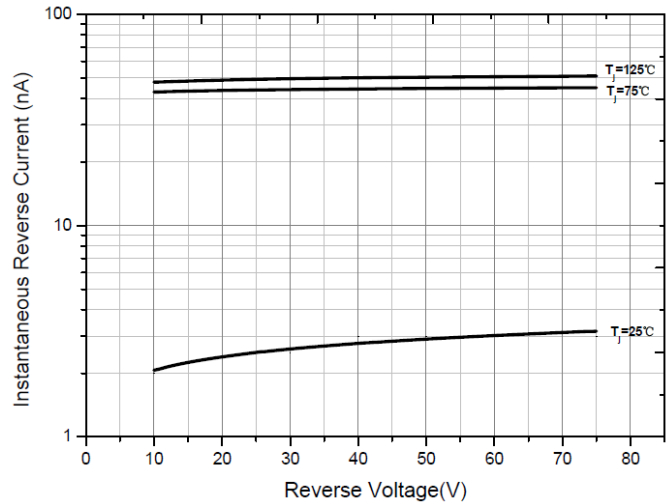
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAW156	F2	Approximate 0.008	3000	30000	120000	7" reel

## ■ Characteristics(Typical)

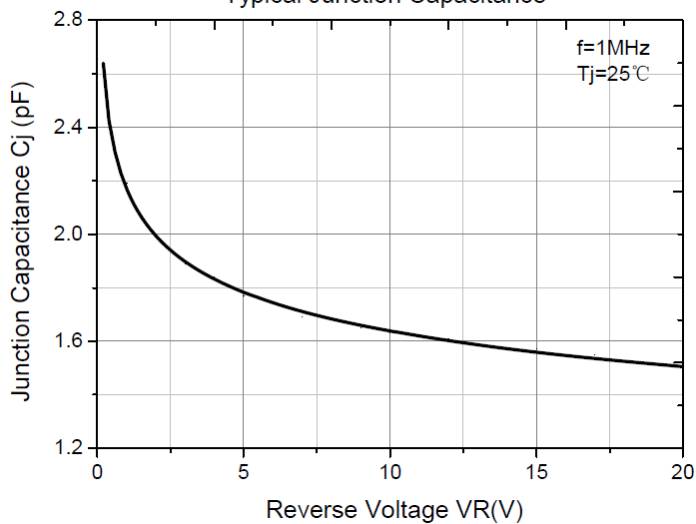
Forward Characteristics



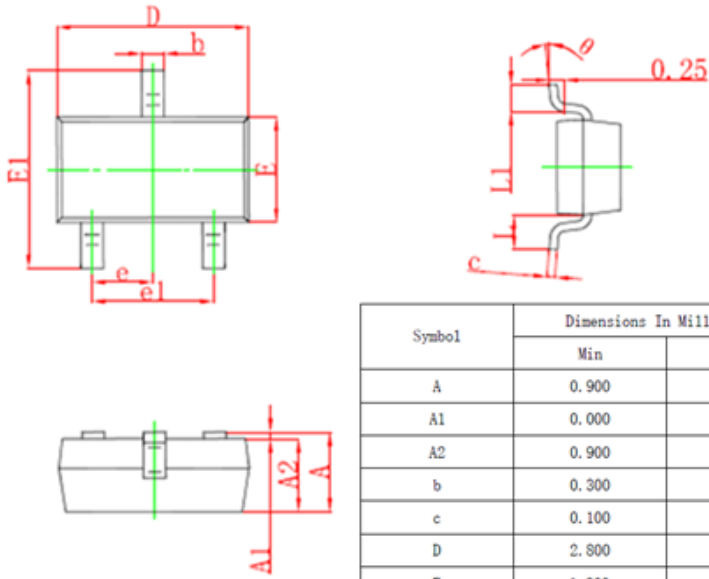
Typical Reverse Characteristics



Typical Junction Capacitance



### ■ 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
ø	0°	8°	0°	8°

### ■ SOT-23 Soldering Footprint

