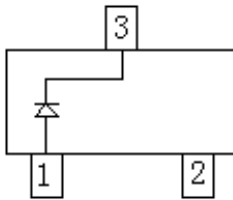


BAS101

Small-Signal Switching Diodes



SOT-23



Features

- VR 250V
- I_{FAV} 200mA

Typical Applications

- Extreme fast switches

Mechanical Data

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

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

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V _{RRM}	V		250
Reverse Voltage	V _R	V		250
Non-Repetitive Peak Forward Surge Current	I _{FSM}	A	t=8.3ms, Half sine-wave	2
Average forward current	I _{FAV}	mA		200
Power dissipation	P _D	mW		250
Junction temperature	T _j	°C		150
Storage temperature range	T _{stg}	°C		-55 to +150

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

PARAMETER	SYMBOL	UNIT	Conditions	Min	Max
Maximum Forward voltage	V _F	V	I _F =100mA		1.1
Maximum Reverse current	I _R	nA	V _R =250V		150
Minimum Breakdown voltage	V _R	V	I _R =100uA	250	
Maximum Diode capacitance	C _D	pF	V _R =0V, f =1MHz		5
Maximum Reverse recovery time	t _{rr}	ns	I _F =I _R =30 mA,RL=100Ω,IRR=3mA		50



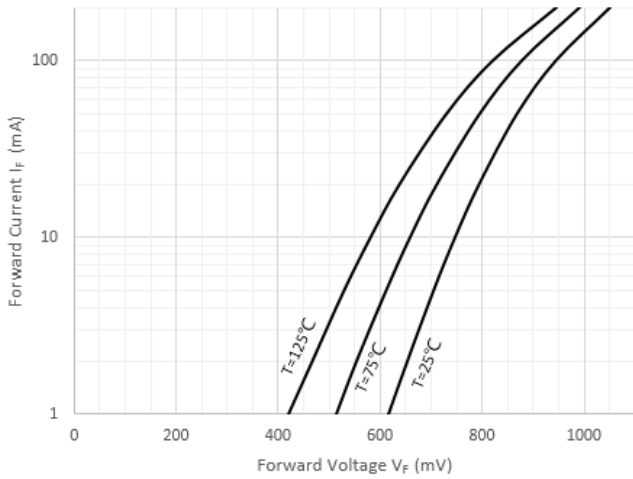
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■ Ordering Information (Example)

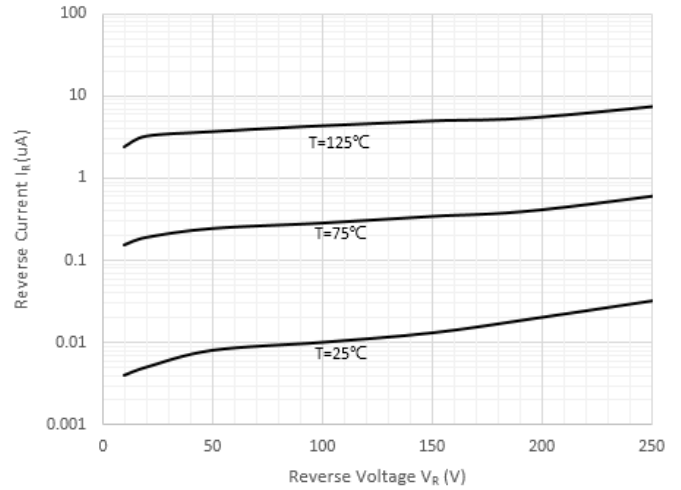
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS101	F2	Approximate 0.008	3000	30000	120000	7" reel

■ Characteristics(Typical)

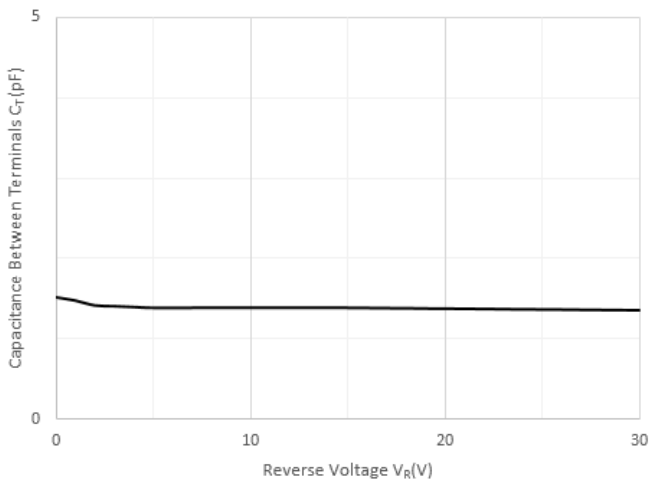
Forward Characteristics



Reverse Characteristics



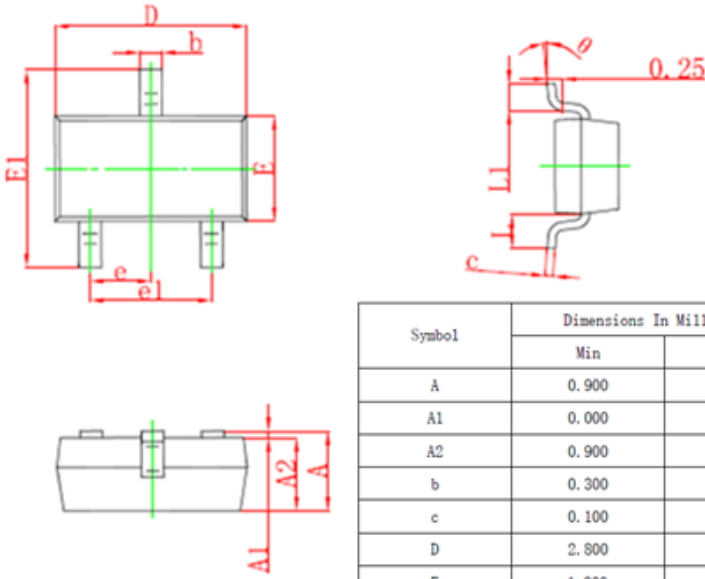
Capacitance Characteristics





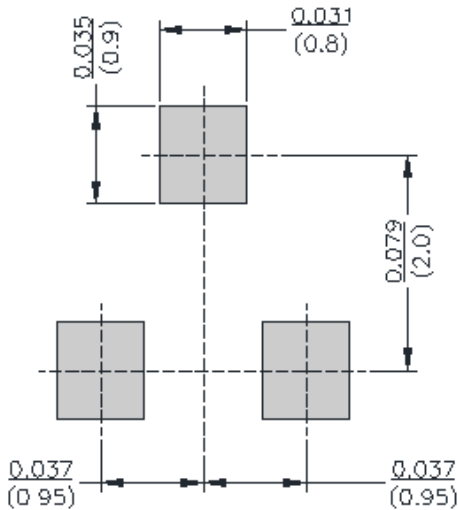
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■ SOT-23 Package Outline Dimensions



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
θ	0°	8°	0°	8°

■ SOT-23 Soldering Footprint





BAS101

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