



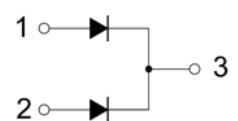
## Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BAS40C-AU_R1_000A1	SOT-23	JA	3000



## Maximum Ratings (Ta=25°C unless otherwise noted)

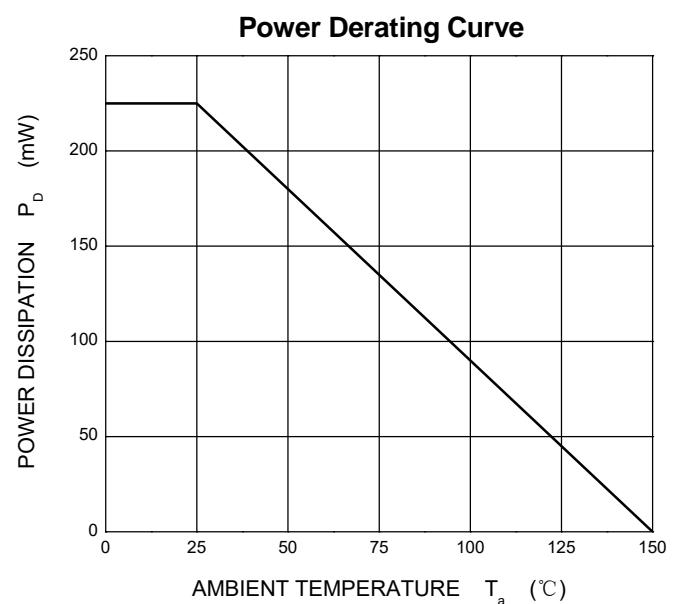
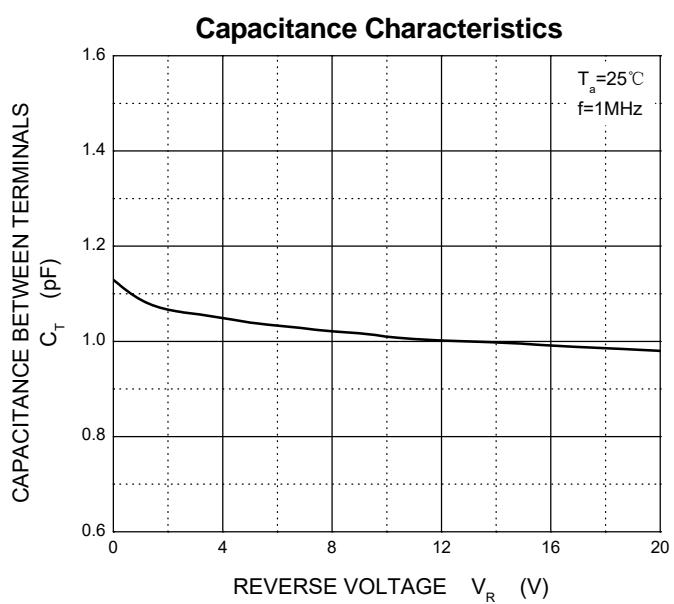
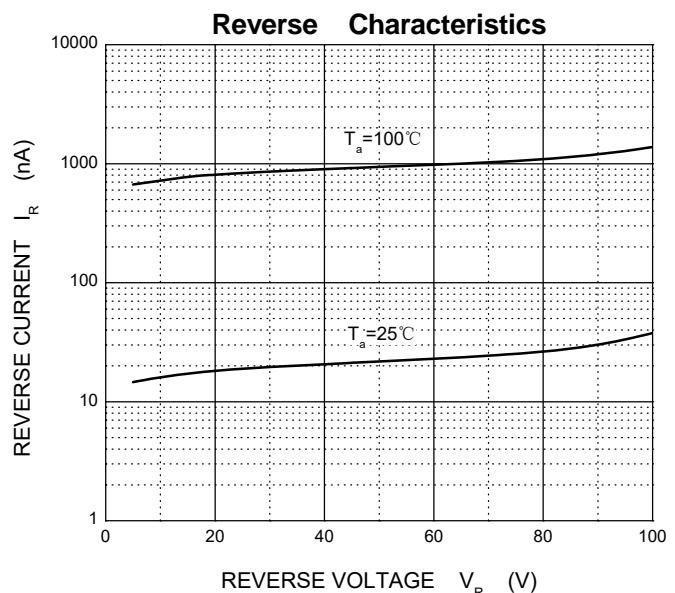
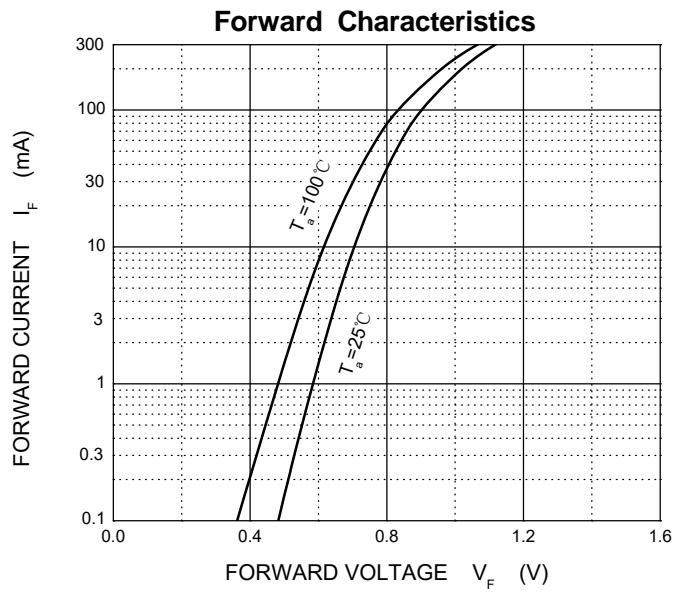
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	50	V
DC Blocking Voltage	V <sub>R</sub>		
Average Rectified Output Current	I <sub>O</sub>	200	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I <sub>FSM</sub>	2.0	A
Power Dissipation	P <sub>D</sub>	225	mW
Thermal Resistance From Junction to Ambient	R <sub>θJA</sub>	556	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature Range	T <sub>STG</sub>	-55~+150	°C

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

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	V <sub>(BR)</sub>	I <sub>R</sub> = 5μA	50		V
Reverse voltage leakage current	I <sub>R</sub>	V <sub>R</sub> =50V		0.1	μA
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =100mA		1	V
Diode Capacitance	C <sub>D</sub>	V <sub>R</sub> =0, f=1MHz		2	pF
Reveres recovery time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA, R <sub>L</sub> =100Ω, I <sub>rr</sub> =0.1×I <sub>R</sub>		4	ns

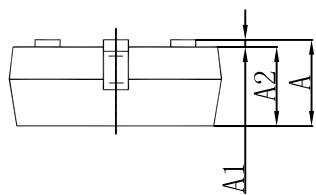
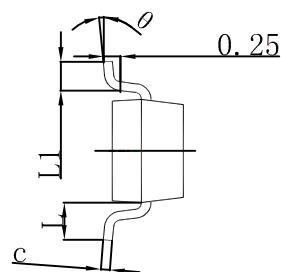
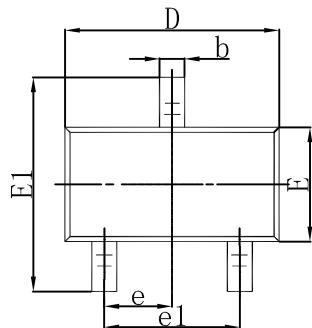


### Typical Characteristics



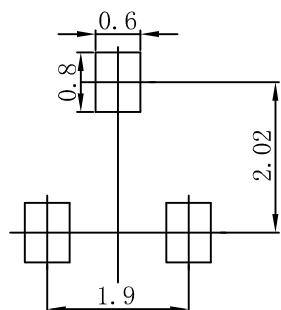


## SOT-23 Package Outline Dimensions



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	0.080	0.150	0.003	0.006
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	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

## SOT-23 Suggested Pad Layout



### Note:

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05$ mm.
3. The pad layout is for reference purposes only.



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