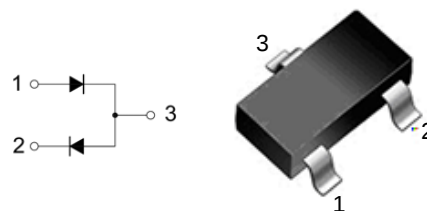


SOT-23 Plastic-Encapsulate Diodes

• Features

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



SOT - 23

• MAXIMUM RATINGS (T_C=25°C)

Parameter	Symbol	Limit	Unit
Repetitive peak reverse voltage	V _{RRM}	250	V
Working peak reverse voltage	V _{RWM}	250	V
DC blocking voltage	V _R	250	V
Forward continuous current	I _{FM}	400	mA
Average rectified output current	I _O	200	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	2.5	A
Repetitive peak forward surge current	I _{FRM}	625	mA
Power dissipation	P _D	225	mW
Thermal resistance junction to ambient	R _{θJA}	555	°C/W
Operation Junction and Storage Temperature Range	T _J , T _{STG}	-55~+150	°C

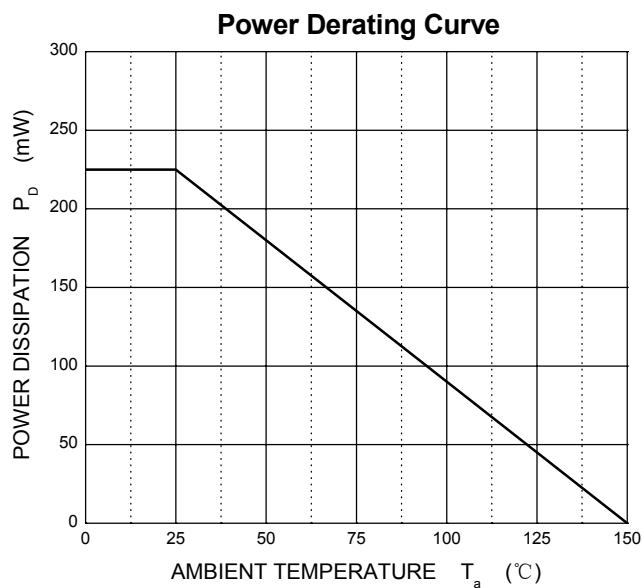
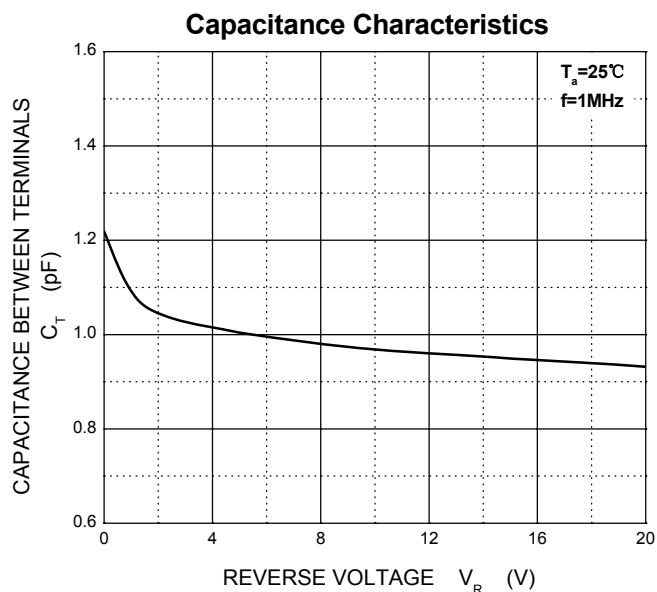
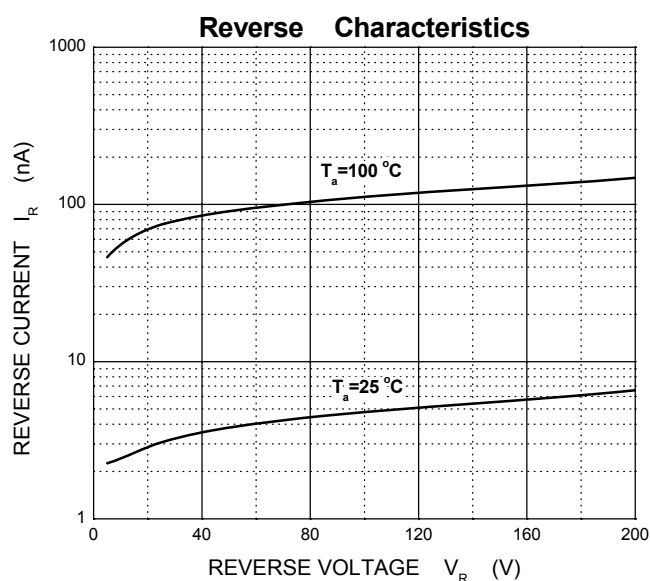
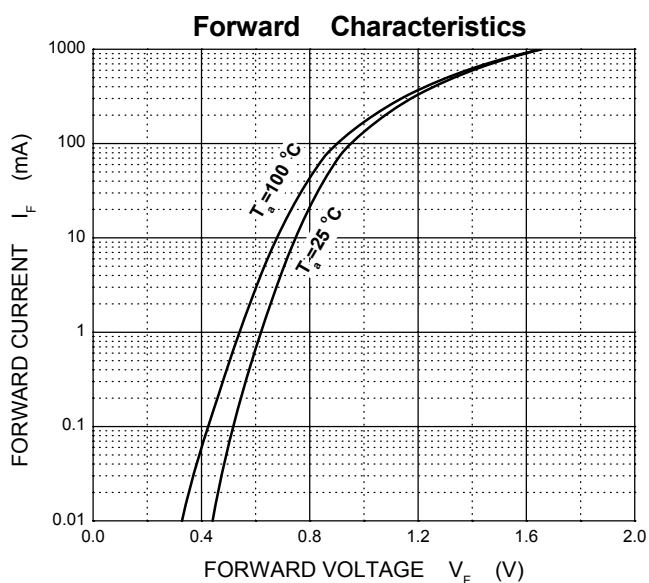
• ELECTRICAL CHARACTERISTICS (T_a=25°C)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	V _(BR)	I _R = 100μA	250		V
Reverse voltage leakage current	I _R	V _R =200V		0.1	μA
Forward voltage	V _F	I _F =100mA I _F =200mA		1000 1250	mV
Diode capacitance	C _D	V _R =0V, f=1MHz		5	pF
Reveres recovery time	t _{rr}	I _F =I _R =30mA, I _{rr} =0.1×I _R , R _L =100 Ω		50	ns

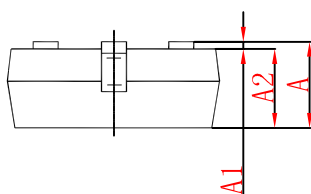
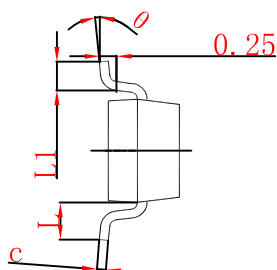
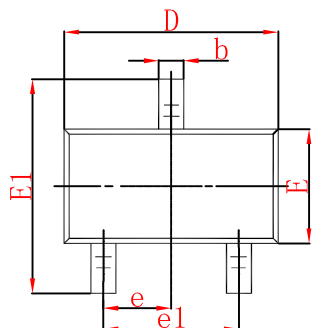
• Ordering Information:

Part NO.	BAS21S
Marking	JS4
Packing Information	REEL TAPE
Basic ordering unit (pcs)	3000

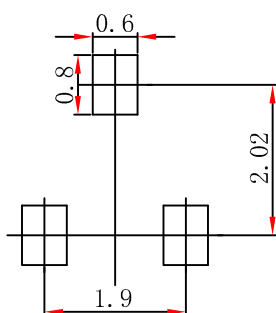
• Typical Characteristics



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°



Note:

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