

BAS21, BAS21C/S

SURFACE MOUNT FAST SWITCHING DIODE

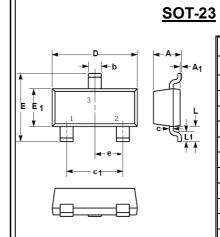
REVERSE VOLTAGE – 250 Volts FORWARD CURRENT – 0.2 Ampere

FEATURES

- Fast Switching Speed
- Ideally suited for automatic insertion
- For general purpose switching applications

MECHANICAL DATA

- Case: SOT-23 Plastic
- Case Material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Moisture Sensitivity: Level 1 per J-STD-020D
- Lead Free in RoHS 2002/95/EC Compliant



SOT-23			
Dim.	Min.	Max.	
Α	0.90	1.15	
A1	0.00	0.10	
b	0.30	0.50	
С	0.08	0.15	
D	2.80	3.00	
Е	2.25	2.55	
E1	1.20	1.40	
е	е 0.95 Тур.		
e1	1.80	2.00	
L	0.55 Ref.		
L1	0.30	0.50	
Dimensions in millimeter			

Maximum Ratings & Thermal Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	BAS21	BAS21C	BAS21S	Units
Repetitive Peak Reverse Voltage	V _{RRM}		•	1	V
Working Peak Reverse Voltage	V_{RWM}		250		V
DC Blocking Voltage	V _R				
Peak Forward Current	l _F		225		mA
Average Rectified Output Current	lo		200		mA
Peak Forward Surge Current	I _{FM}		625		mA
Power Dissipation	P _D		225		mW
Thermal Resistance Junction to Ambient	R⊕JA		417		°C/W
Operating Temperature Range	TJ		150		$^{\circ}\!\mathbb{C}$
Storage Temperature Range	Tstg		-55~+150		$^{\circ}\!\mathbb{C}$

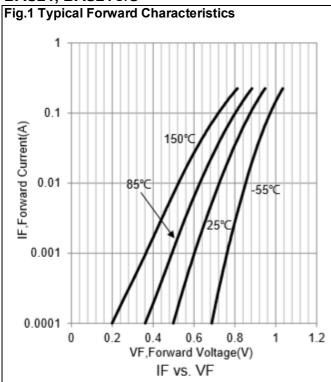
Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Test Condition	Symbol	BAS21	BAS21C	BAS21S	Unit
Reverse Breakdown Voltage	I _R = 100uA	V_{BR}		250		V
Maximum Forward Voltage	I _F = 100mA I _F = 200mA	V _F		1 1.25		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	V _R = 200V V _R = 200V,TJ=150°C	I _R		0.1 100		uA
Typical Diode Capacitance	V _R =0V,f=1MHz	С		5		pF
Reverse Recovery time	Irr=3mA, $I_F=I_R=30$ mA, $R_L=100\Omega$	trr		50		nS

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RATING AND CHARACTERISTIC CURVES BAS21, BAS21C/S





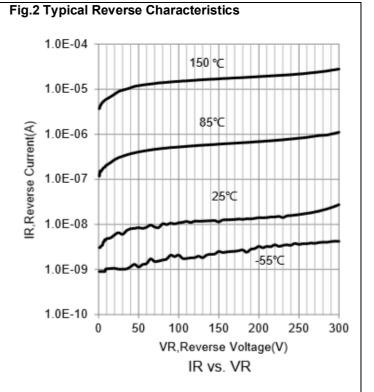
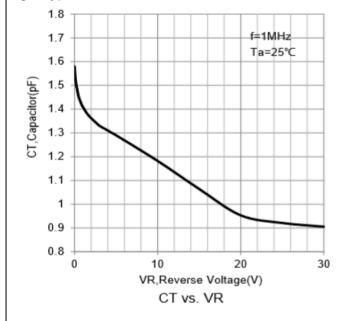


Fig.3 Typical Junction Characteristics



Device Marking:

Device P/N	Marking	Equivalent Circuit Diagram
BAS21	JS	3 0
BAS21C	JU	3 0 0 1
BAS21S	JT	3 0 0 1



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