

# Micro Commercial Components Corp.

Complete Discrete Semiconductor Solutions

Part Number	BAS21WS
product family	SWITCHING DIODES
package type	SOD-323
VRM(PRV)	250V
Ifsm	625mA
IF(AV)	200mA
@Vf	1.25V
@If	200mA
Trr	50nS
IR	0.1μΑ
@VR	200V
Package Qty	Tape: 3K/Reel, 360K/Ctn;

This product is listed under the following categories where you may find similar products: Diodes

Switching Diodes



**Micro Commercial Components** 

### BAS21WS

### **Features**

- For Surface Mount Application.
- Device Marking: JS
  Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- For Surface Mount Application.
- Lead Free Finish/RoHS Compliant("P" Suffix designates RoHS Compliant. See ordering information)

### **Maximum Ratings**

Symbol	Rating	Value	Unit
$V_R$	Continuous Reverse Voltage	250	Vdc
I <sub>F</sub>	Peak Forward Current	200	mAdc
I <sub>FM(surge)</sub>	Peak Forward Surge Current	625	mAdc

### **Thermal Characteristics**

Symbol	Characteristic	Max	Unit
	Total Device Dissipation FR-5	200	mW
$P_{D}$	Board *, T <sub>A</sub> =25 <sup>o</sup> C		
	Derate above 25°C	1.57	mW/ <sup>o</sup> C
R <sub>JA</sub>	Thermal Resistance Junction to Ambient	635	°C/W
$T_{J}, T_{STG}$	Junction and Storage Temperature Range	-55 to +155	°C

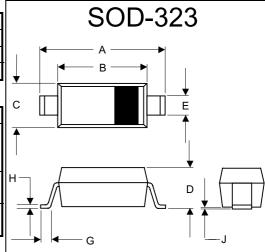
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Characteristic	Min	Max	Unit
Off Characteristics				
I <sub>R</sub> Reverse Voltage Leakage Current				
	(V <sub>p</sub> =200Vdc)		0.1	uAdc

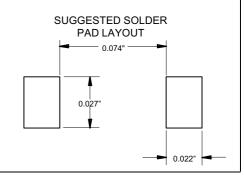
$I_R$	Reverse Voltage Leakage Current			
	(V <sub>R</sub> =200Vdc)		0.1	uAdc
	$(V_R=200Vdc, T_J=150^{\circ}C)$		100	
$V_{(B)}$	V <sub>(BR)</sub> Reverse Breakdown Voltage			
,	(I <sub>BR</sub> =100uAdc)			Vdc
$V_{F}$	Forward Voltage			
	(I <sub>F</sub> =100mAdc)		1000	mVdc
	(I <sub>F</sub> =200mAdc)		1250	
C	Diode Capacitance			
	$(V_R=0, f=1.0MHz)$		5.0	рF
trr	trr Reverse Recovery Time			
	$(I_F = I_R = 30 \text{ mAdc}, R_L = 100 \text{ OHM})$		50	ns

<sup>\*</sup>FR-5 Minimum Pad

### **High Voltage Switching Diode**



DIMENSIONS					
DIM	INCHES		INCHES MM		NOTE
	MIN	MAX	MIN	MAX	
Α	.090	.107	2.30	2.70	
В	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
Е	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
Н	.004	.010	0.10	0.25	
J		.006		0.15	





### **Ordering Information**

Device	Packing
(Part Number)-TP	Tape&Reel3Kpcs/Reel

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