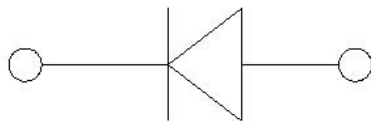


## BAS521

### Small-Signal Switching Diodes



#### Features

- $V_R$  250V
- $I_{FAV}$  200mA

#### Typical Applications

- Extreme fast switches

#### Mechanical Data

- **Package:** SOD523
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** JS

#### ■Maximum Ratings ( $T_a=25^\circ\text{C}$ 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	$t=8.3\text{ms}$ , Half sine-wave	2
Average forward current	$I_{FAV}$	mA		200
Power dissipation	$P_D$	mW		150
Junction temperature	$T_j$	$^\circ\text{C}$		150
Storage temperature range	$T_{stg}$	$^\circ\text{C}$		-55 to +150

#### ■Electrical Characteristics ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

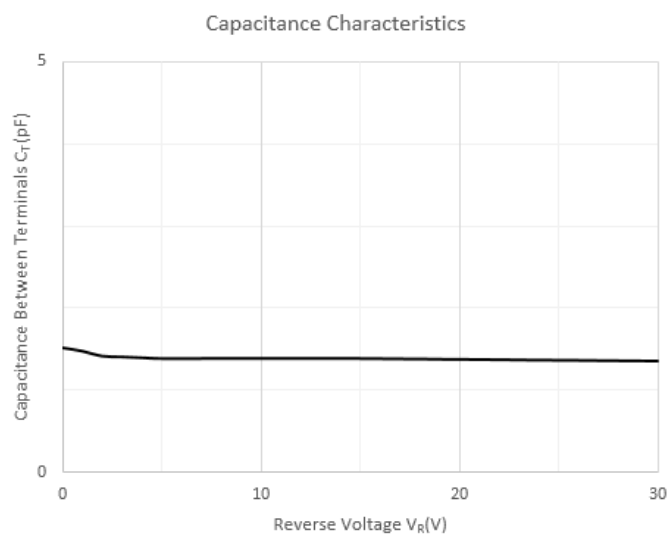
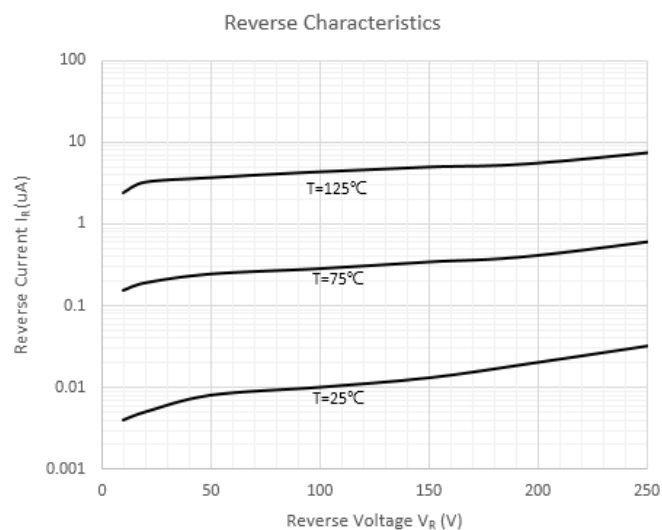
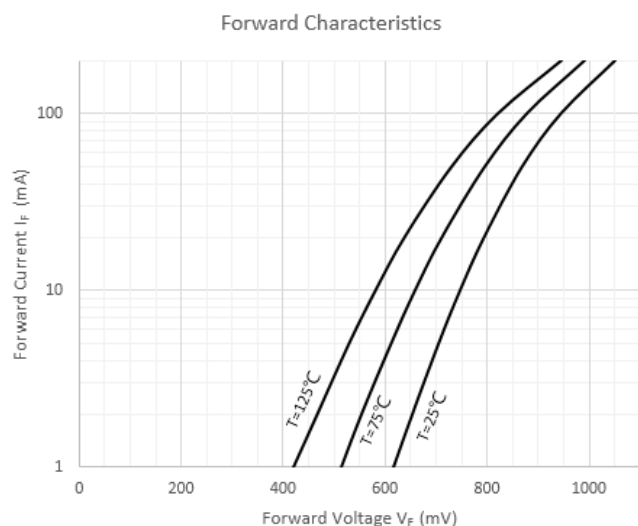
PARAMETER	SYMBOL	UNIT	Conditions	Min	Max
Maximum Forward voltage	$V_F$	V	$I_F=100\text{mA}$		1.1
Maximum Reverse current	$I_R$	nA	$V_R=250\text{V}$		150
Minimum Breakdown voltage	$V_R$	V	$I_R=100\mu\text{A}$	250	
Maximum Diode capacitance	$C_D$	pF	$V_R=0\text{V}$ , $f=1\text{MHz}$		5
Maximum Reverse recovery time	$t_{rr}$	ns	$I_F=I_R=30\text{mA}$ , $R_L=100\Omega$ , $I_{RR}=3\text{mA}$		50

## BAS521

### ■ Ordering Information (Example)

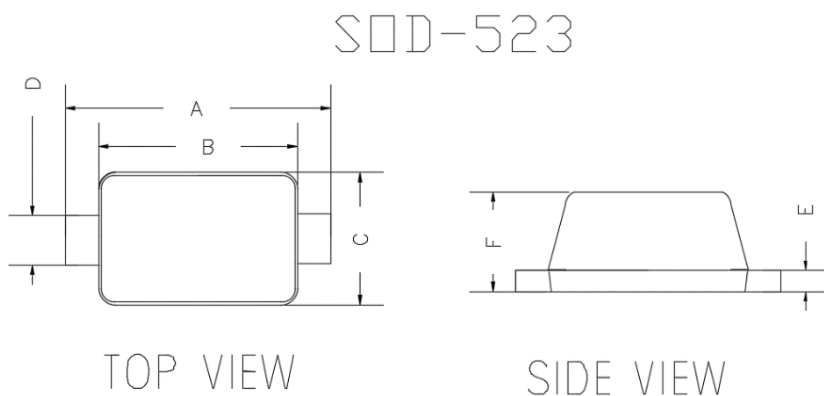
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS521	F2	Approximate 0.002	8000	80000	320000	7" reel

### ■ Characteristics(Typical)



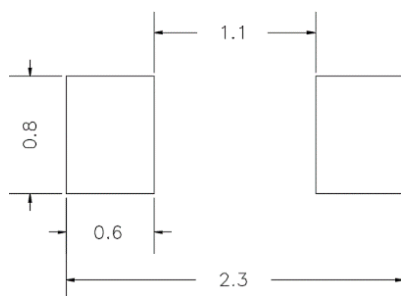
## BAS521

### ■ Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.059	0.067	1.500	1.700
B	0.043	0.051	1.100	1.300
C	0.028	0.035	0.700	0.900
D	0.010	0.014	0.250	0.350
E	0.002	0.008	0.050	0.200
F	0.020	0.028	0.500	0.700

### ■ Soldering Footprint



UNIT: mm

SUGGESTED SOLDER PAD LAYOUT

## BAS521

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### Disclaimer

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