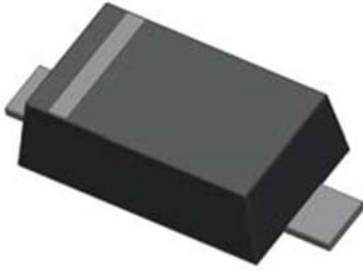


## BAS521

### Small-Signal Switching Diodes



#### Features

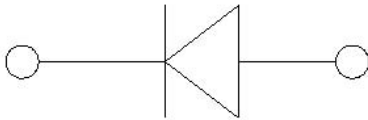
- $V_R$  250V
- $I_{FAV}$  200mA

#### 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 (Ta=25°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=8.3ms, Half sine-wave	2
Average forward current	$I_{FAV}$	mA		200
Power dissipation	$P_D$	mW		150
Junction temperature	$T_j$	°C		150
Storage temperature range	$T_{stg}$	°C		-55 to +150

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

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



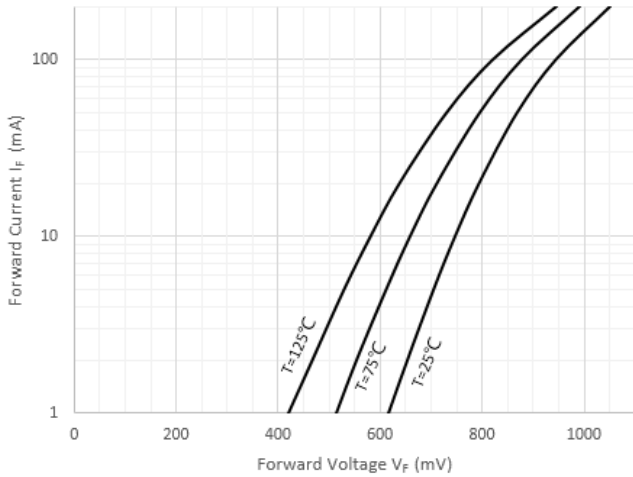
# BAS521

## Ordering Information (Example)

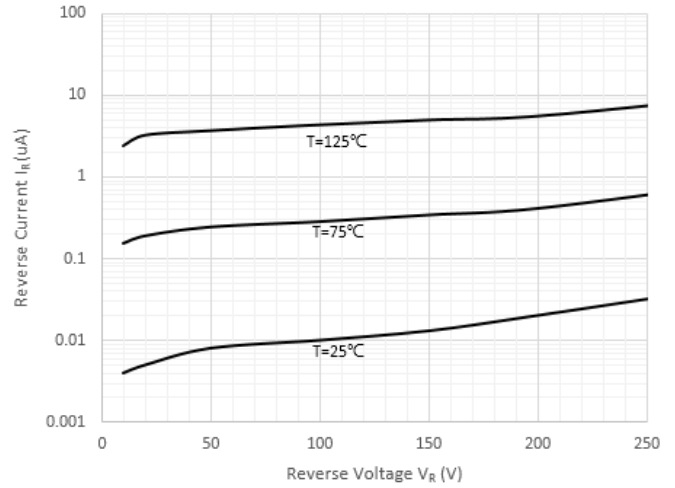
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS521	F2	Approximate 0.002	8000	80000	320000	7" reel

## Characteristics(Typical)

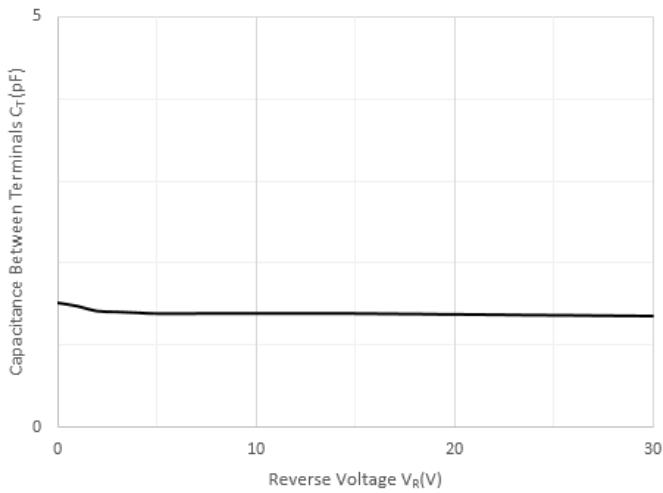
Forward Characteristics



Reverse Characteristics



Capacitance Characteristics

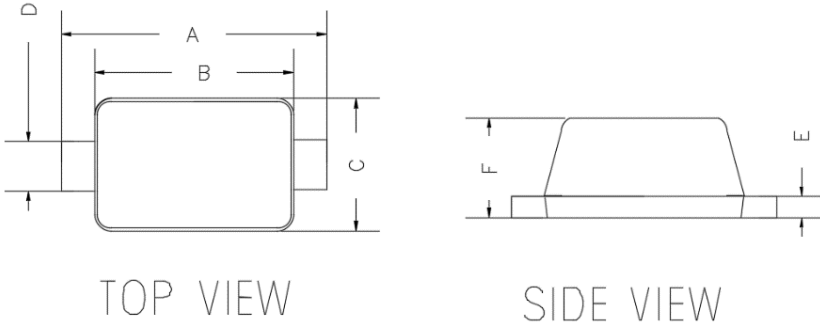




# BAS521

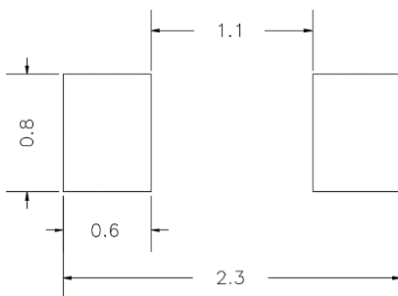
## ■ Outline Dimensions

SOD-523



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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