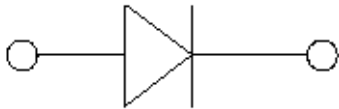


## Small-Signal Fast Switching Diodes



### Features

- $V_R$  100V
- $I_{FAV}$  200mA

### Typical Applications

- Low-Leakage

### Mechanical Data

- **Package:** SOD323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** D4

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

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	$V_{RRM}$	V		85
Reverse voltage	$V_R$	V		100
Peak forward surge current	$I_{FSM}$	A	Non-Repetitive $t = 1 \mu\text{s}$	4
Average forward current	$I_{FAV}$	mA		200
Power dissipation	$P_{tot}$	mW		250
Maximum 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
Breakdown Voltage	$V_R$	V	$I_R=100\mu\text{A}$	100	
Forward Voltage	$V_F$	V	$I_F=1\text{mA}$		0.9
			$I_F=10\text{mA}$		1.0
			$I_F=50\text{mA}$		1.1
			$I_F=150\text{mA}$		1.25
Reverse Leakage Current	$I_R$	nA	$V_R=75\text{V}$		5
Capacitance	C	pF	$V_R=0\text{V}, f=1\text{MHz}$		4
Reverse Recovery Time	$T_{rr}$	us	$I_F=I_R=10\text{mA}, I_{rr}=1\text{mA}, R_L=100\Omega$		3



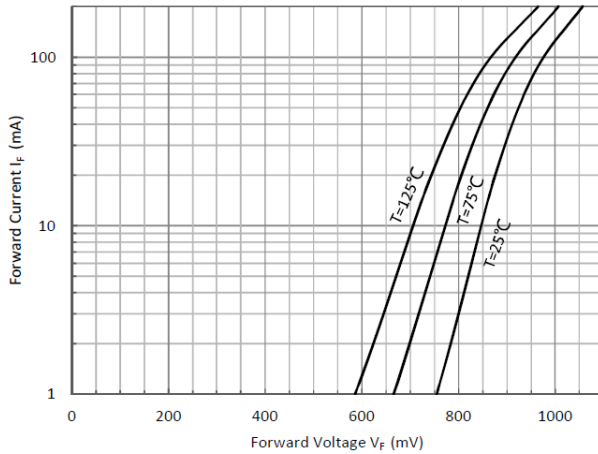
# BAS416

## Ordering Information (Example)

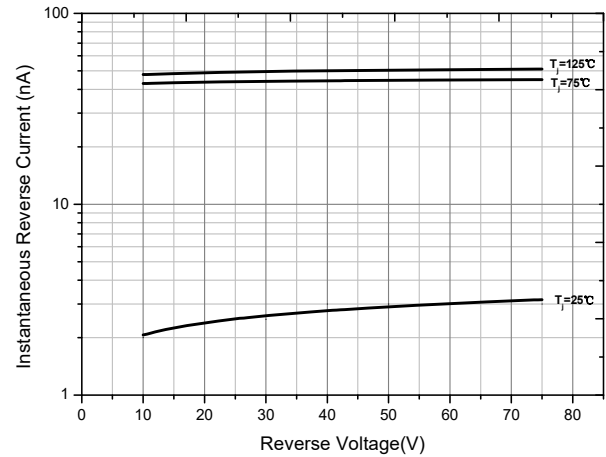
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS416	F2	Approximate 0.004	3000	30000	120000	7" reel

## Characteristics (Typical)

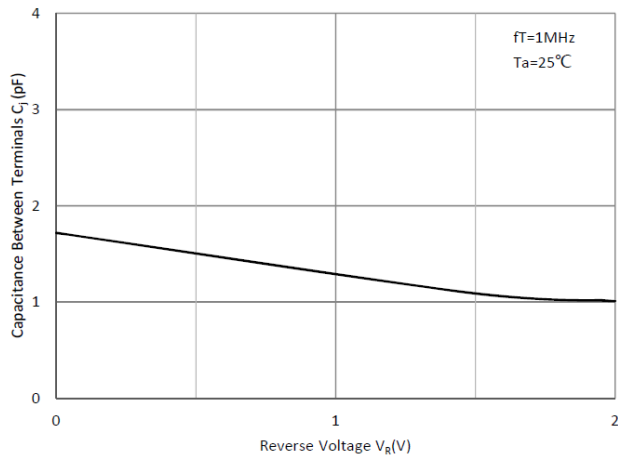
Forward Characteristics



Typical Reverse Characteristics



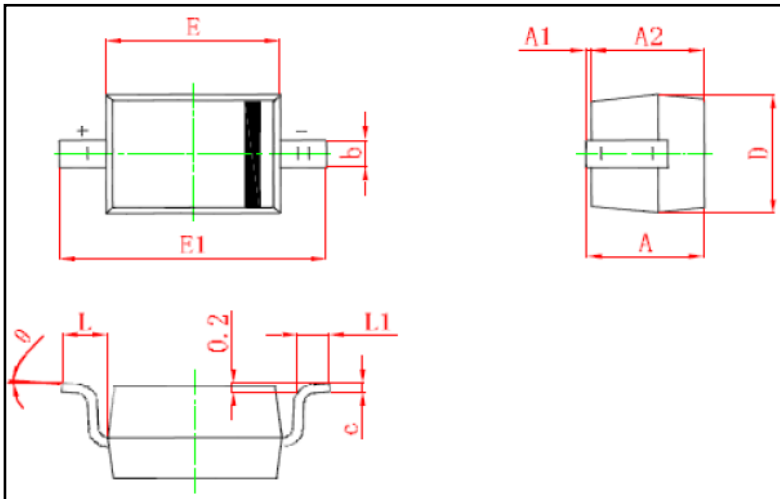
Capacitance Characteristics





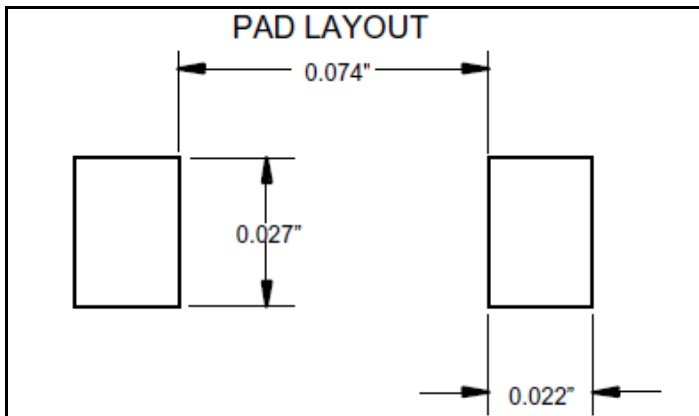
# BAS416

## ■ SOD-323 Package Outline Dimensions



Symbol	Min. (mm)	Max. (mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.400
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°

## ■ SOD-323 Soldering Footprint



Unit: inches



## BAS416

---

### Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.