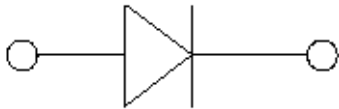


Small-Signal Fast Switching Diodes



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



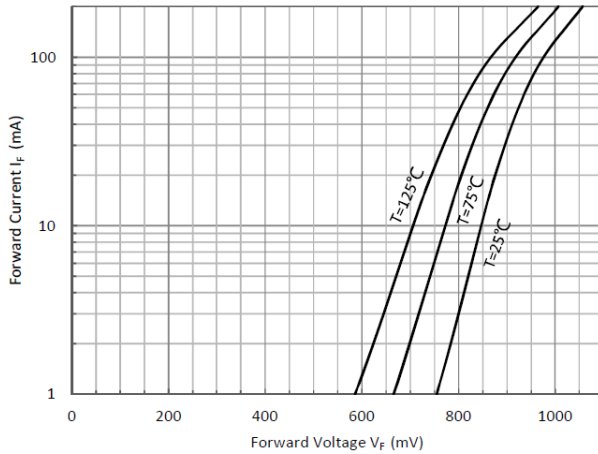
BAS416

Ordering Information (Example)

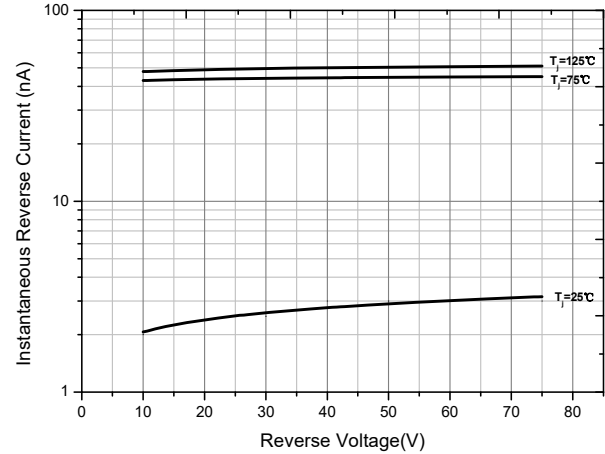
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS416	F2	Approximate 0.004	3000	30000	120000	7" reel

Characteristics (Typical)

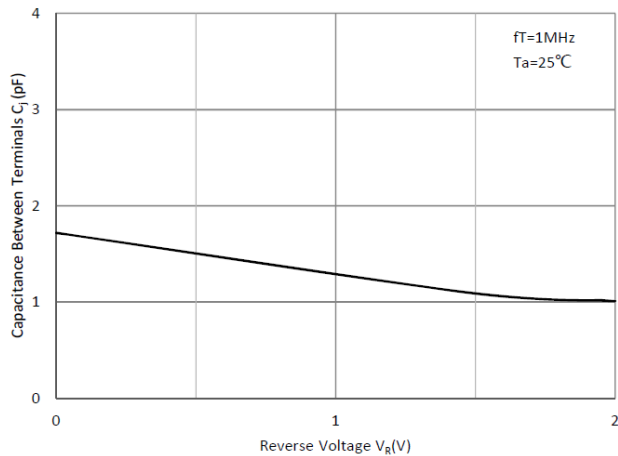
Forward Characteristics



Typical Reverse Characteristics



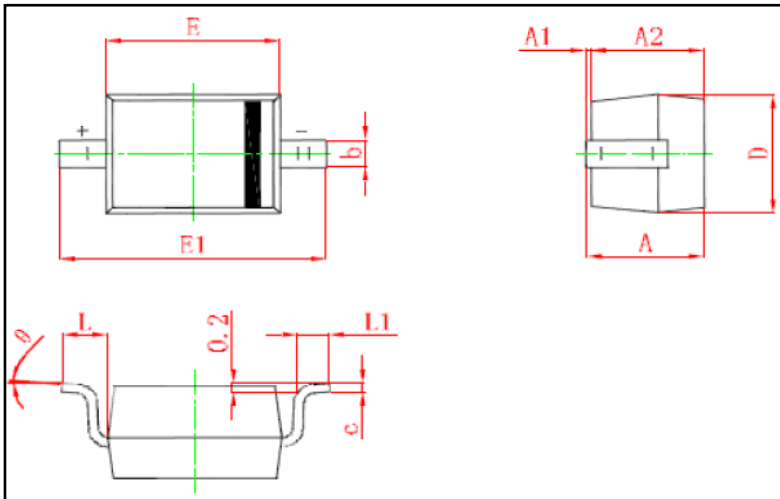
Capacitance Characteristics





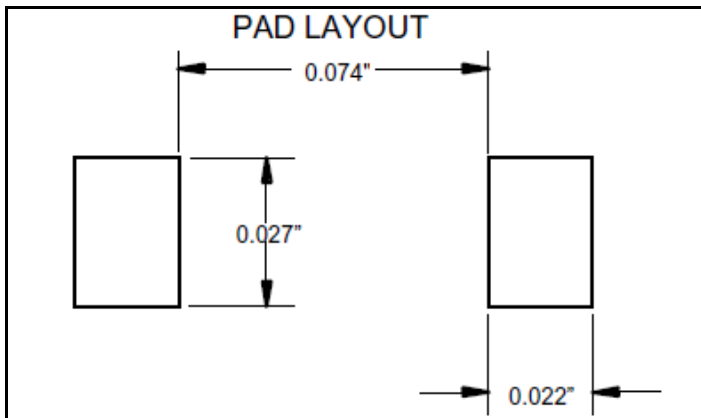
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■ SOD-323 Package Outline Dimensions



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

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