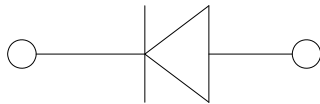
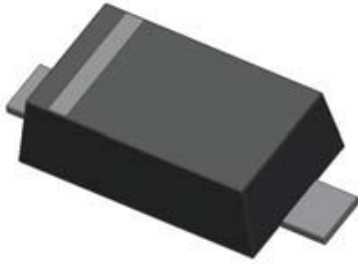


Small-Signal Fast Switching Diodes



Features

- V_R 75V
- I_{FAV} 200mA

Typical Applications

- Fast Switching Speed

Mechanical Data

- **Package:** SOD523
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** S1

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

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V_{RRM}	V		75
Reverse voltage	V_R	V	$I_R=100\mu\text{A}$	75
Peak forward surge current	I_{FSM}	A	Pulse width=1ms	1
Average forward current	I_{FAV}	mA		200
Power dissipation	P_{tot}	mW		200
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	$I_R=100\mu\text{A}$	75	
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	$V_R=0\text{V}, f=1\text{MHz}$		2
Reverse Recovery Time	T_{rr}	us	$I_F=I_R=10\text{mA}, I_{rr}=0.1*I_R, R_L=100\Omega$		3

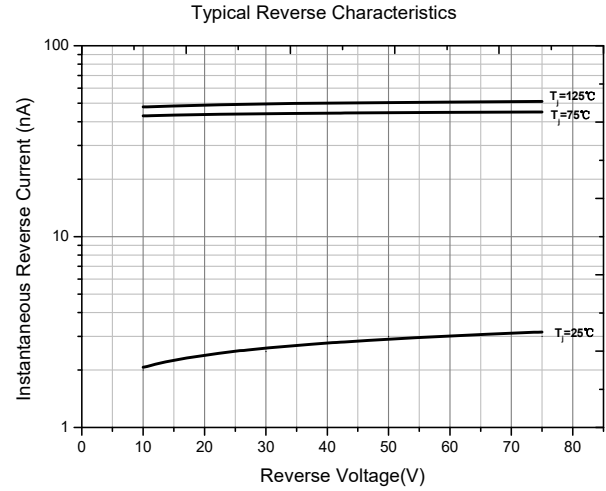
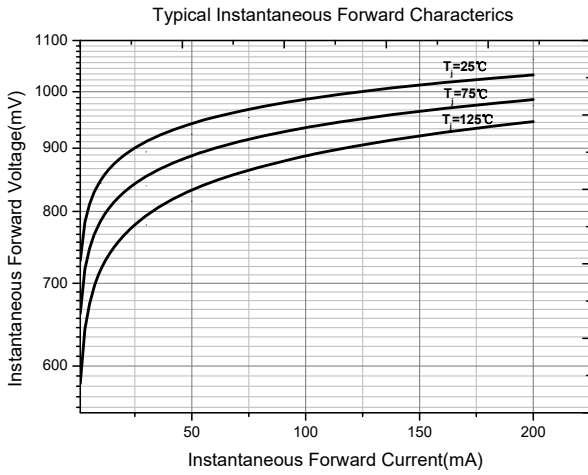


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Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS716	F2	Approximate 0.002	8000	80000	320000	7" reel

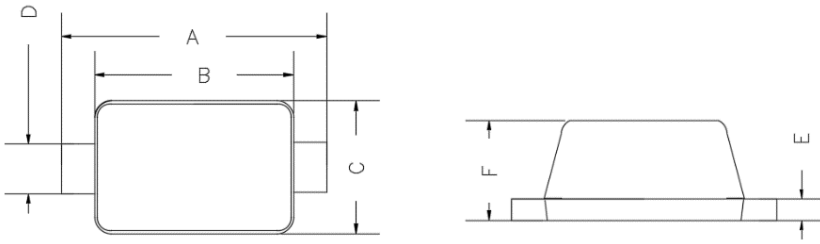
Characteristics (Typical)





■ Outline Dimensions

SOD-523

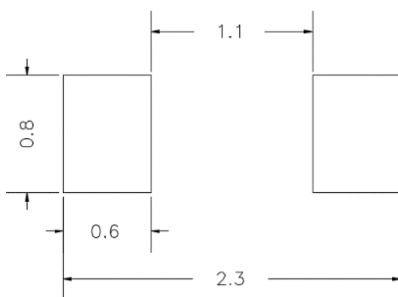


TOP VIEW

SIDE VIEW

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



BAS716

Disclaimer

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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.

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