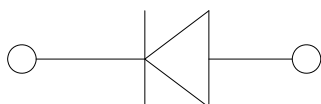


Small-Signal Fast Switching Diodes



Features

- VR 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°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V _{RRM}	V		75
Reverse voltage	V _R	V	IR=100uA	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	°C		150
Storage temperature range	T _{stg}	°C		-55 to +150

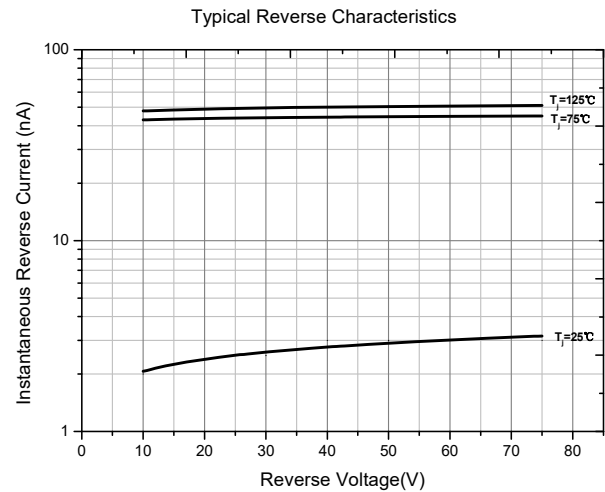
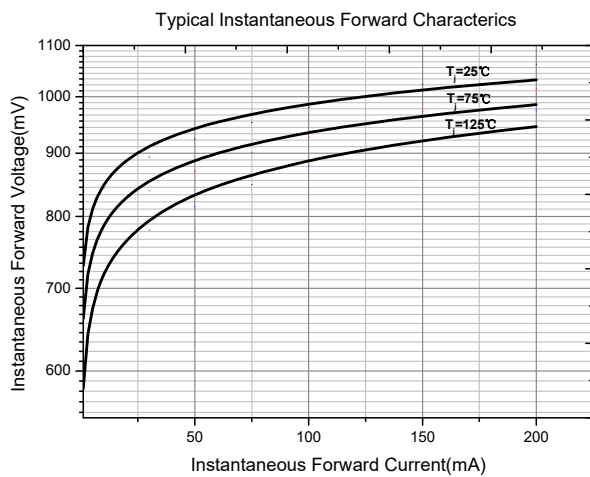
■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER	Symbol	UNIT	Conditions	Min	Max
Breakdown Voltage	V _R	V	IR=100uA	75	
Forward Voltage	V _F	V	IF=1mA		0.9
			IF=10mA		1.0
			IF=50mA		1.1
			IF=150mA		1.25
Reverse Leakage Current	I _R	nA	VR=75V		5
Capacitance	C	pF	VR=0V, f=1MHz		2
Reverse Recovery Time	T _{rr}	us	IF=IR=10mA, I _{rr} =0.1*IR, RL=100Ω		3

■ Ordering Information (Example)

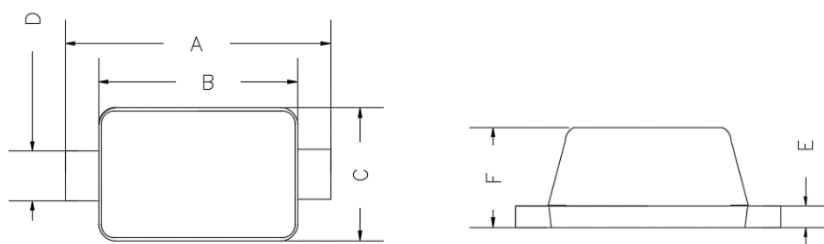
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS716	F2	Approximate 0.002	8000	80000	320000	7" reel

■ Characteristics (Typical)



■ Outline Dimensions

SOD-523

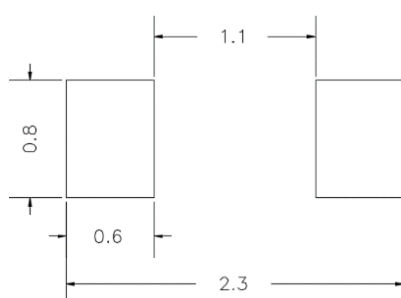


TOP VIEW

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

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