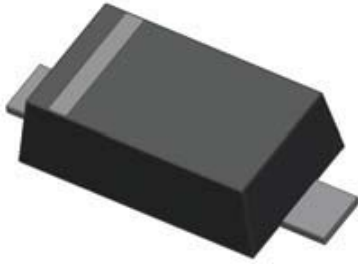


Small-Signal Fast Switching Diodes

Features

- V_R 100V
- I_{FAV} 250mA

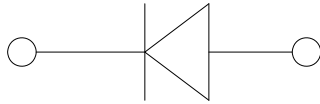


Typical Applications

- 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:** 61



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

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V_{RRM}	V		100
Reverse voltage	V_R	V	$I_R=100\mu\text{A}$	100
Peak forward surge current	I_{FSM}	A	Pulse width=1 μs Pulse width=1 s	2 1
Non-repetitive peak forward surge current	I_{FSM}	A	8.3ms half sine-wave	1
Average forward current	I_{FAV}	mA		250
Power dissipation ^A	P_D	mW		250
Maximum junction temperature	T_j	$^\circ\text{C}$		-55 to +150
Storage temperature range	T_{stg}	$^\circ\text{C}$		-55 to +150

Note A. PCB尺寸: 20*15mm, 其中铜箔尺寸: 7.8*9.6mm

■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	$I_F=1\text{mA}$		0.715
			$I_F=10\text{mA}$		0.855
			$I_F=50\text{mA}$		1.00
			$I_F=150\text{mA}$		1.25
Reverse Leakage Current	I_{R1}	nA	$V_R=25\text{V}$		30
	I_{R2}	μA	$V_R=75\text{V}$		1
Capacitance	C	pF	$V_R=0\text{V}, f=1\text{MHz}$		4
Reverse Recovery Time	T_{rr}	ns	$I_F=I_R=10\text{mA}, I_{rr}=0.1 \cdot I_R, R_L=100\Omega$		4

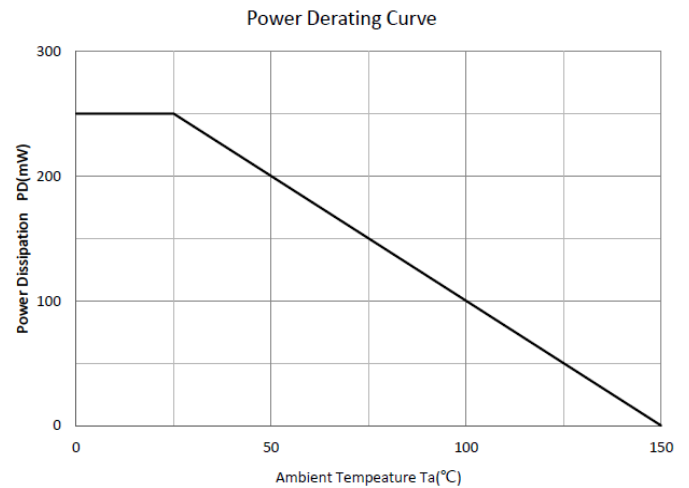
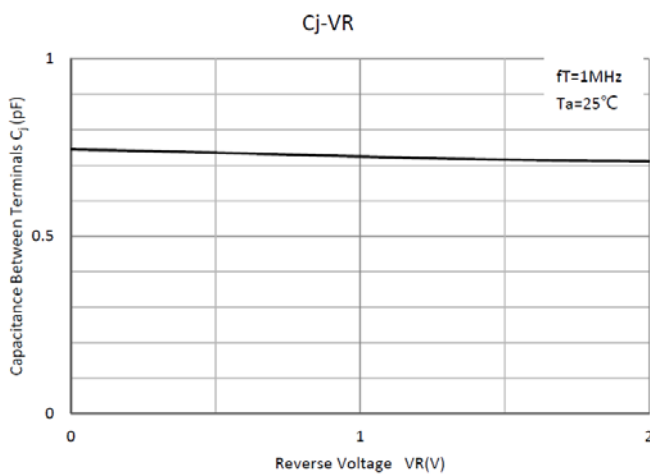
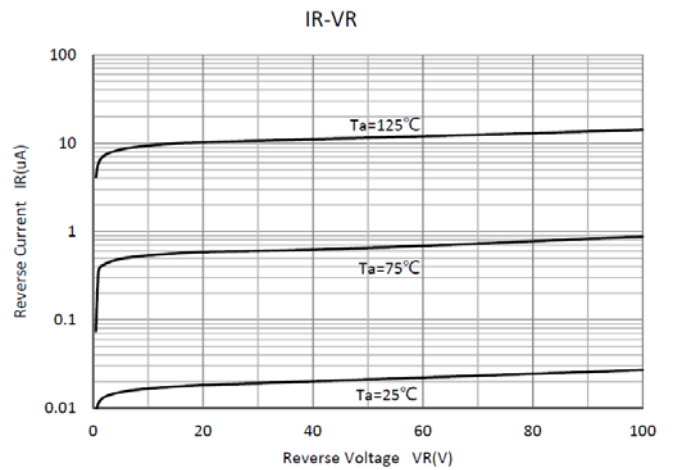
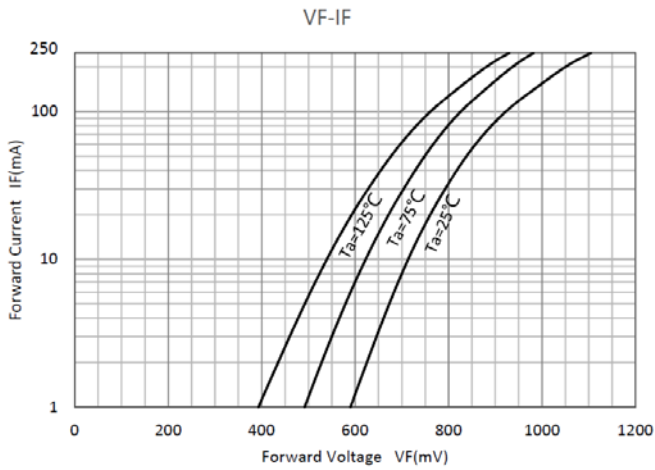


BAS516

Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS516	F2	Approximate 0.002	8000	80000	320000	7" reel

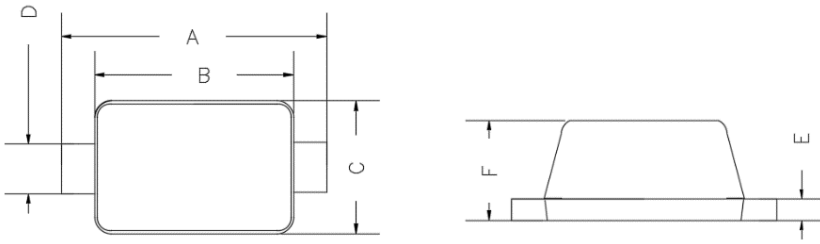
Characteristics (Typical)





■ Outline Dimensions

SOD-523

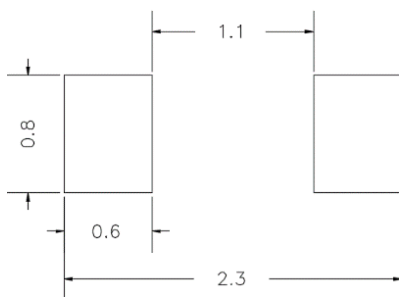


TOP VIEW

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



BAS516

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