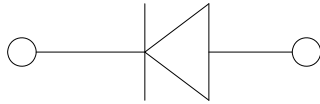
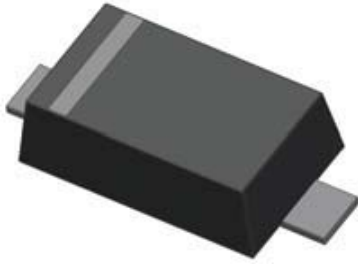


## Small-Signal Fast Switching Diodes



### 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 $\mu\text{s}$ 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 <sup>A</sup>	$P_D$	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
	$I_{R2}$	$\mu\text{A}$	$V_R=75\text{V}$		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

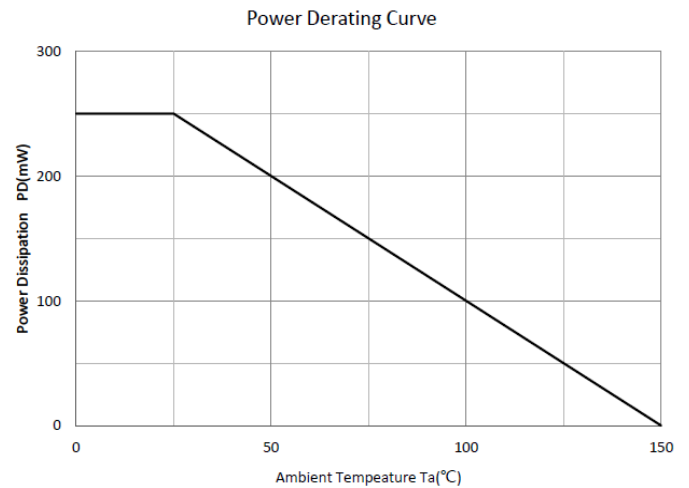
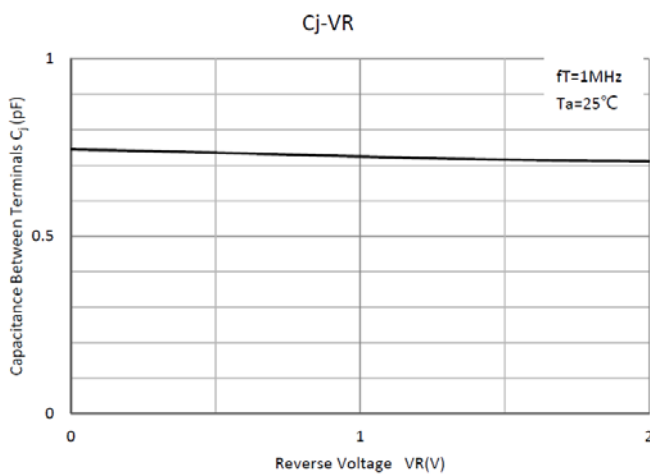
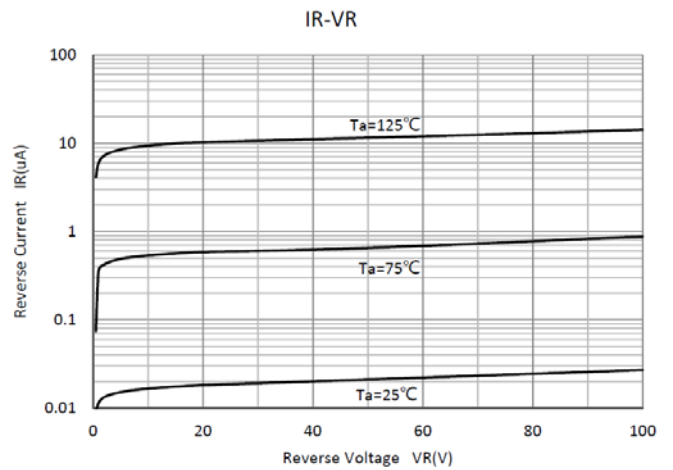
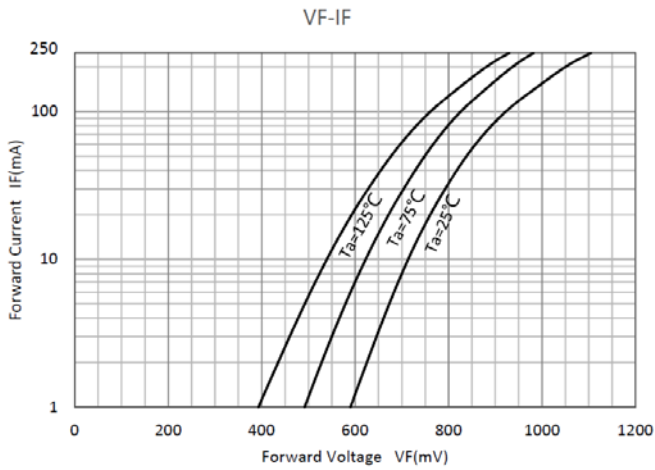


# BAS516

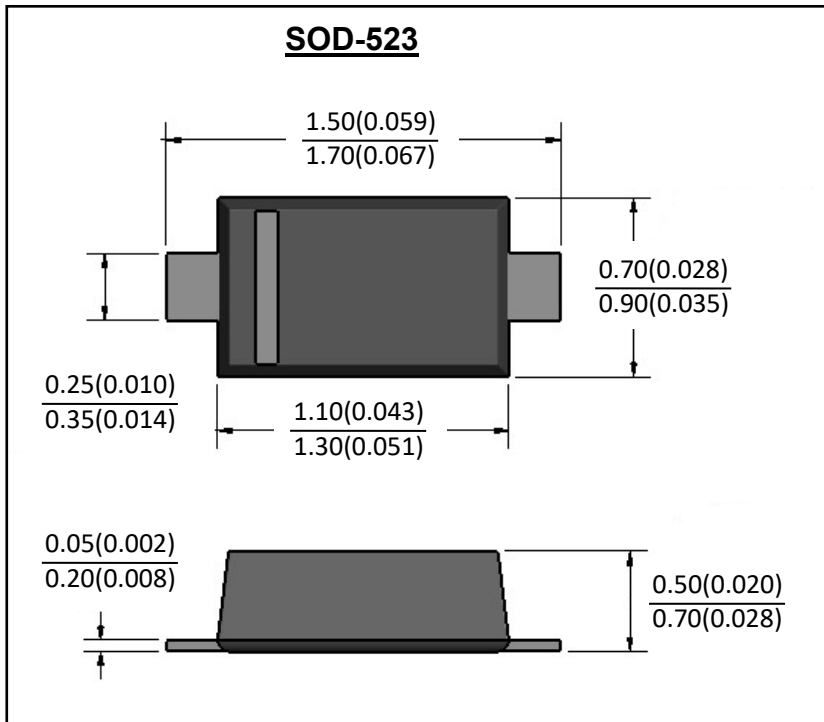
## Ordering Information (Example)

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

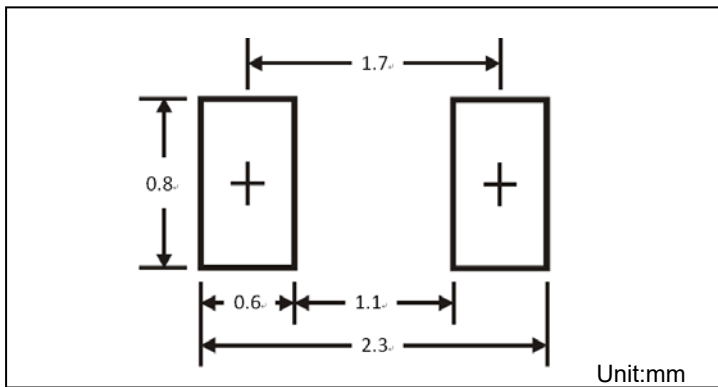
## Characteristics (Typical)



## ■ SOD-523 Package Outline Dimensions



## ■ SOD-523 Soldering Footprint





## BAS516

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