

#### DESCRIPTION

The BAS516 is available in SOD-523 Package.

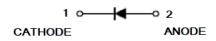
# FEATURES

- Extremely small surface mounting type.
- Small package.
- High speed and high reliability

## ORDERING INFORMATION

Package Type	Part Number		
SOD-523	BAS516		
Note	3,000pcs/Reel		
AiT provides all RoHS Compliant Products			

# PIN DESCRIPTION



#### ABSOLUTE MAXIMUM RATINGS

T<sub>A</sub> = 25°C

VRRM, Repetitive Peak Reverse Voltage	90V
V <sub>R</sub> , Continuous Reverse Voltage	80V
I <sub>F</sub> , Continuous Forward Current (Double Diode Loaded)	225mA
Iғsм, Surge current	0.5A
P <sub>D</sub> , Total power dissipation	150mW
T <sub>J</sub> , Junction Temperature	125°C
T <sub>STG</sub> , Storage Temperature Range	-55°C ~+125°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.



## ELECTRICAL CHARACTERISTICS

 $T_A = 25^{\circ}C$ , unless otherwise noted

Parameter	Symbol	Conditions	Min	Тур.	Max	Unit
Forward Voltage	VF	I <sub>F</sub> = 100mA	-		1.2	V
Reverse Current	IR	V <sub>R</sub> = 80V	-		20	μA
Diode Capacitance	CD	V <sub>R</sub> = 0.5V, f = 1MHz	-	0.72	3.0	pF
Reverse Recovery Time	t <sub>rr</sub>	$V_R=6V, I_F=10mA, R_L=100\Omega$	-		4	ns

# TYPICAL CHARACTERISTICS

T<sub>A</sub> = 25°C

Figure 1. Forward Characteristics

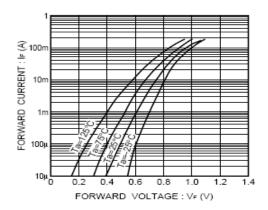
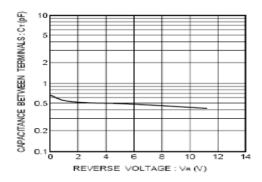
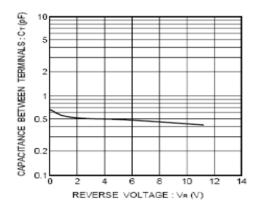


Figure 3. Capacitance between terminals



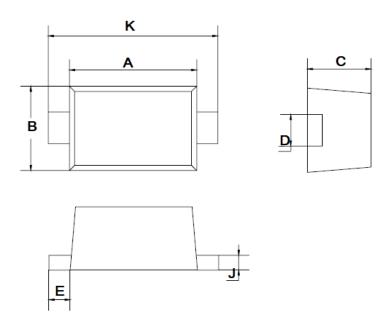
#### Figure 2. Reverse Characteristics





# PACKAGE INFORMATION

Dimension in SOD-523 Package (Unit: mm)



UNIT	SOD-523			
	MIN	MAX		
А	1.10	1.30		
В	0.70	0.90		
С	0.50	0.70		
D	0.25	0.35		
E	0.15	0.25		
J	0.1 (Тур)			
К	1.50	1.70		



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