



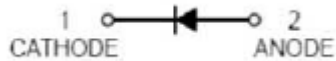
## DESCRIPTION

The B0520WS~B0540WS are available in SOD-323 package

## ORDERING INFORMATION

Package Type	Part Number
SOD-323	B0520WS
	B0530WS
	B0540WS
Note	SPQ:3,000pcs/Reel
AiT provides all RoHS Compliant Products	

## PIN DESCRIPTION



## FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction For Transient Protection.
- Negligible Reverse Recovery Time.
- Low Reverse Capacitance.
- Available in SOD-323 package

## APPLICATIONS

- Schottky barrier switching.



## ABSOLUTE MAXIMUM RATINGS

@ T<sub>A</sub>=25°C, unless otherwise specified

Parameter	Symbol	B0520WS	B0530WS	B0540WS	Unit
Peak Repetitive Peak Reverse Voltage	V <sub>RR</sub>				
Working Peak	V <sub>RWM</sub>	20	30	40	V
DC Reverse Voltage	V <sub>R</sub>				
RMS Reverse Voltage	V <sub>R(RMS)</sub>	14	21	28	V
Forward Continuous Current	I <sub>F</sub>	350			mA
Repetitive Peak Forward Current @t≤1.0s	I <sub>FRM</sub>	1.5			A
Power Dissipation	P <sub>D</sub>	400			mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	300			°C/W
Storage Temperature	T <sub>STG</sub>	-65-+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<sub>A</sub>=25°C, unless otherwise specified

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	I <sub>R</sub> =10μA B0520WS	20			V
		I <sub>R</sub> =10μA B0530WS	30	-	-	
		I <sub>R</sub> =10μA B0540WS	40			
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	-	-	0.37	V
		I <sub>F</sub> =200mA			0.60	
Reverse Current	I <sub>RM</sub>	V <sub>R</sub> =10V B0520WS				μA
		V <sub>R</sub> =20V B0530WS	-	-	5.0	
		V <sub>R</sub> =30V B0540WS				
Capacitance Between Terminals	C <sub>T</sub>	V <sub>R</sub> =0, f=1MHz	-	50	-	pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>R</sub> =I <sub>F</sub> =200mA, I <sub>rr</sub> =0.1 x I <sub>R</sub> , R <sub>L</sub> =100Ω	-	10	-	ns



## TYPICAL CHARACTERISTICS

@  $T_A=25^{\circ}\text{C}$ , unless otherwise specified

Figure 1. Typical Forward Characteristics

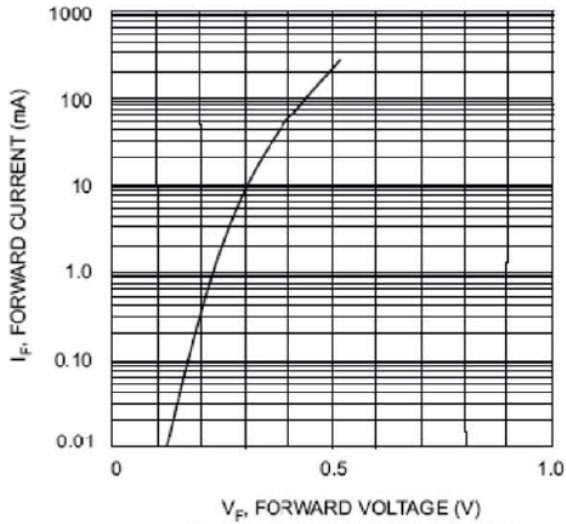
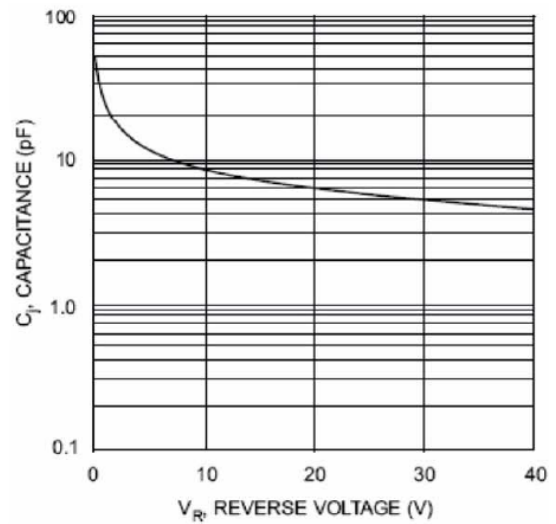
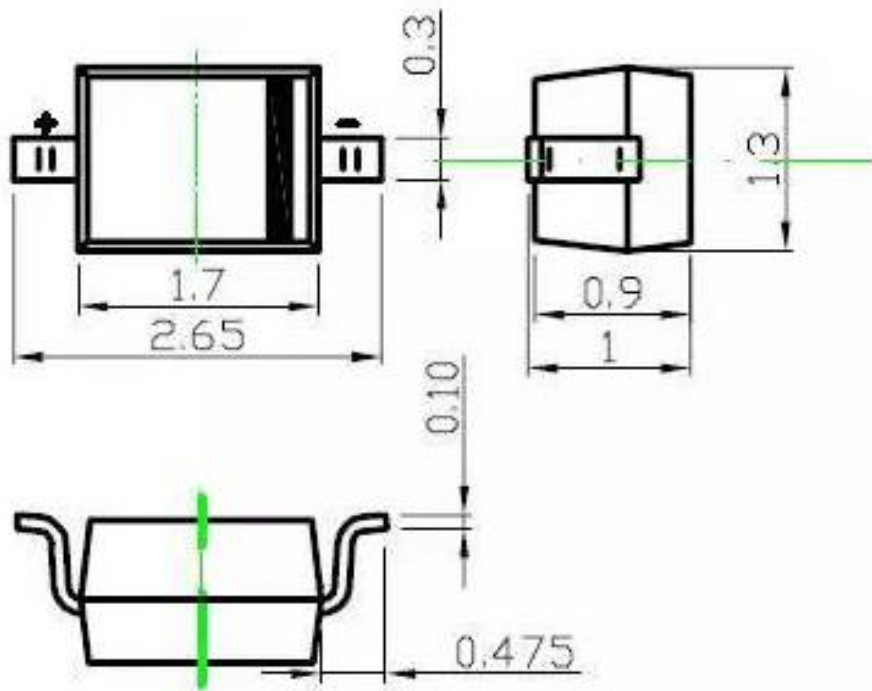


Figure 2. Typ. Junction Capacitance vs. Reverse Voltage



## PACKAGE INFORMATION

Dimension in SOD-323 Package (Unit: mm)





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