



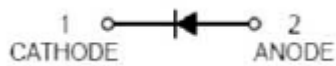
DESCRIPTION

The B0520W~B0540W are available in SOD-323 Package

ORDERING INFORMATION

Package Type	Part Number
SOD-323	B0520W
	B0530W
	B0540W
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.
- RoHS Compliant
- Available in SOD-323 Package

APPLICATIONS

- Schottky barrier switching.



ABSOLUTE MAXIMUM RATINGS

@ T_A=25°C, unless otherwise specified

Parameter	Symbol	B0520W	B0530W	B0540W	Unit
Peak Repetitive Peak Reverse Voltage	V _{RR}				
Working Peak	V _{RWM}	20	30	40	V
DC Reverse Voltage	V _R				
RMS Reverse Voltage	V _{R(RMS)}	14	21	28	V
Forward Continuous Current	I _F	350			mA
Repetitive Peak Forward Current @t≤1.0s	I _{FRM}	1.5			A
Power Dissipation	P _D	400			mW
Thermal Resistance Junction to Ambient	R _{θJA}	300			°C/W
Storage temperature	T _{STG}	-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_A=25°C, unless otherwise specified

Parameter	Symbol	Conditions		Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	V _{(BR)R}	I _R =10μA	B0520W	20			V
		I _R =10μA	B0530W	30	-	-	
		I _R =10μA	B0540W	40			
Forward Voltage	V _F	I _F =20mA		-	-	0.37	V
		I _F =200mA				0.60	
Reverse Current	I _{RM}	V _R =10V	B0520W				μA
		V _R =20V	B0530W	-	-	5.0	
		V _R =30V	B0540W				
Capacitance Between Terminals	C _T	V _R =0, f=1MHz		-	50	-	pF
Reverse Recovery Time	t _{rr}	I _R =I _F =200mA, I _{rr} =0.1 x I _R , R _L =100Ω		-	10	-	ns



TYPICAL CHARACTERISTICS

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

Figure 1. Typical Forward Characteristics

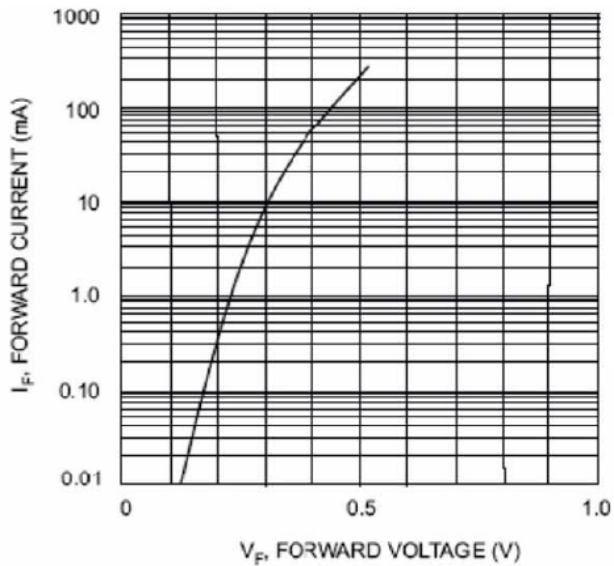
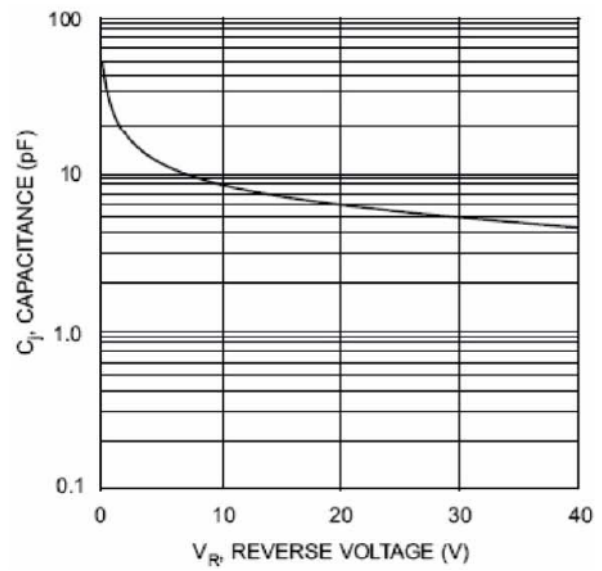


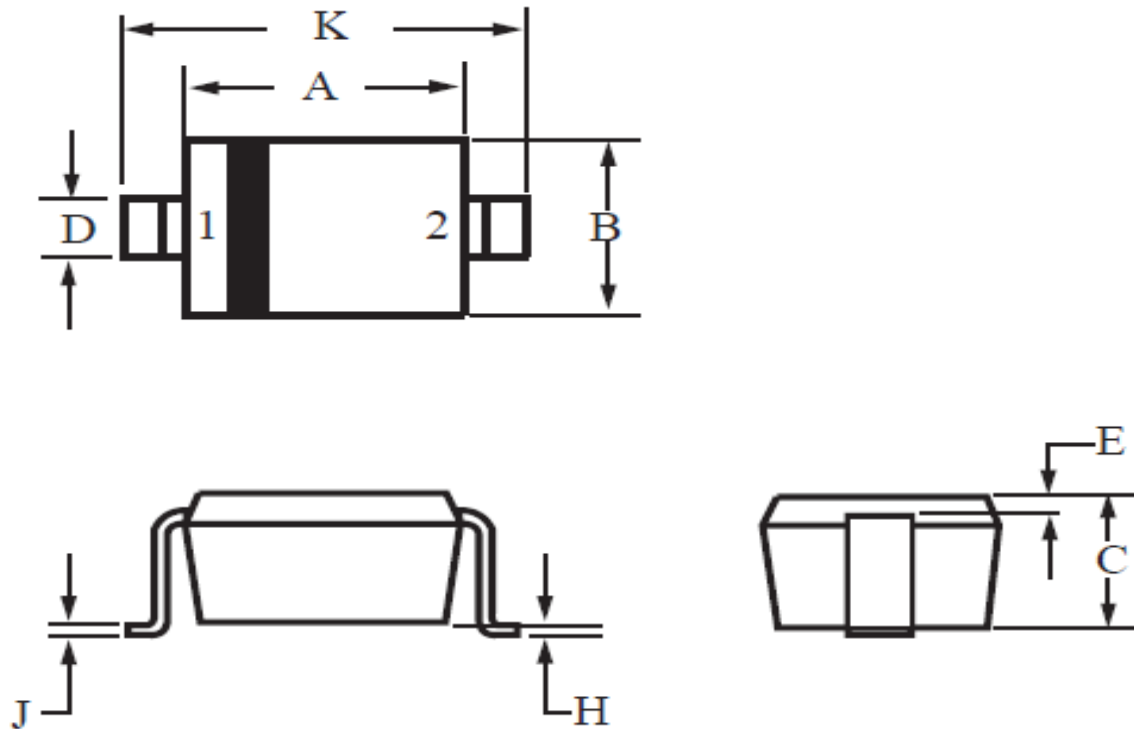
Figure 2. Junction Capacitance vs. Reverse Voltage





PACKAGE INFORMATION

Dimension in SOD-323 Package (Unit: mm)



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.600	1.800	0.063	0.071
B	1.150	1.350	0.045	0.053
C	0.800	1.000	0.031	0.039
D	0.250	0.400	0.010	0.016
E	0.15 REF		0.006 REF	
H	0.000	0.100	0.000	0.004
J	0.089	0.177	0.0035	0.0070
K	2.300	2.700	0.091	0.106



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