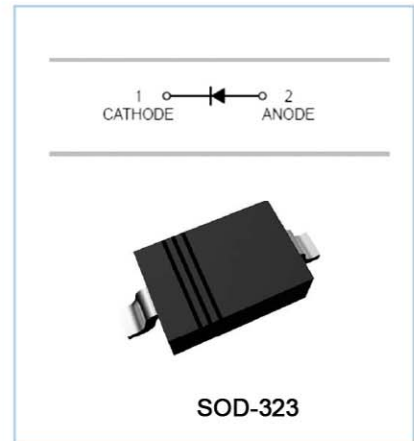


FEATURES

- Low Forward Voltage Drop.
- Guard Ring Construction For Transient Protection.
- Negligible Reverse Recovery Time.
- Low Reverse Capacitance.

APPLICATIONS

- Schottky barrier switching.



ORDERING INFORMATION

Type No.	Marking	Package Code
B0520WS	SD	SOD-323
B0530WS	SE	SOD-323
B0540WS	SF	SOD-323

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Parameter	Symbol	B0540WS	B0530WS	B0520WS	Unit
Peak Repetitive Peak reverse voltage	V_{RR}				
Working Peak DC Reverse Voltage	V_{RWM}	40	30	20	V
	V_R				
RMS Reverse Voltage	$V_{R(RMS)}$	28	21	14	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	$R_{\theta JA}$	300			°C/W
Storage temperature	T_{stg}	-65~+125			°C

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	B0540WS B0530WS B0520WS	40 30 20			V	$I_R=10\mu A$ $I_R=10\mu A$ $I_R=10\mu A$
Forward voltage				0.37 0.60	V	$I_F=20mA$ $I_F=200mA$
Reverse current	B0540WS B0530WS B0520WS			5.0	μA	$V_R=30V$ $V_R=20V$ $V_R=10V$
Capacitance between terminals			50		pF	$V_R=0, f=1MHz$
Reverse Recovery Time			10		ns	$I_R=I_F=200mA$ $I_{rr}=0.1 \cdot I_R, R_L=100\Omega$

TYPICAL CHARACTERISTICS @ $T_a=25^\circ C$ unless otherwise specified

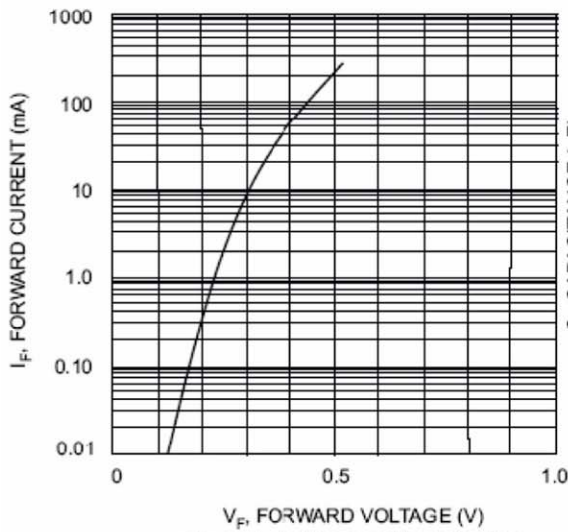


Fig. 1 Typical Forward Characteristics

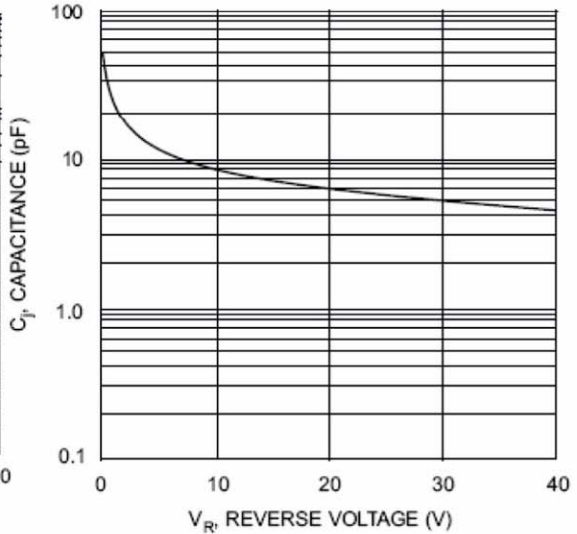
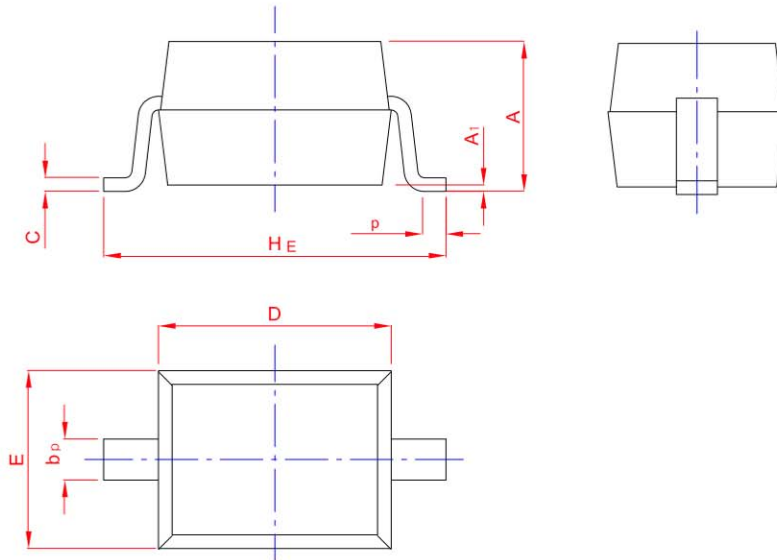


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	b _p	C	D	E	H _E	A ₁	L _p
mm	1.20	0.40	0.15	1.80	1.35	2.80	0.10	0.50
	0.90	0.25	0.10	1.60	1.15	2.30	0.01	0.20