

EVVOSEMI[®]

THINK CHANGE DO



ESD



TVS



MOS



LDO



Diode



Sensor



DC-DC

Product Specification

▶ Domestic	Part Number	B0520WS THRU B0540WS
▶ Overseas	Part Number	B0520WS THRU B0540WS
▶ Equivalent	Part Number	B0520WS THRU B0540WS

EV is the abbreviation of name EVVO

SCHOTTKY BARRIER RECTIFIERS
FEATURES

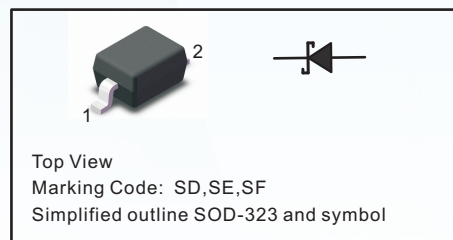
- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- High Conductance
- Also Available in Lead Free Version

MECHANICAL DATA

- Case: SOD-323
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 5.48mg / 0.00019oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode


Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	B0520WS	B0530WS	B0540WS	Units	
Peak Repetitive Reverse Voltage	V_{RRM}	20	30	40	V	
RMS reverse voltage reverse voltage (DC)	V_{RMS}	14	21	28	V	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V	
Maximum Average Forward Current at Ta=25°C	I_O	0.5			A	
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	22			A	
Maximum Instantaneous Forward Voltage	V_F	IF=0.1A	0.33	0.36	–	V
		IF=0.5A	0.39	0.45	0.51	
		IF=1A	–	–	0.62	
Reverse current	I_R	VR=10V	75	–	–	uA
		VR=15V	–	75	–	
		VR=20V	250	100	10	
		VR=30V	–	500	–	
		VR=40V	–	–	20	
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	500			°C/W	
Junction temperature	T_j	-55 ~ +125			°C	
Storage temperature	T_{stg}	-55 ~ +150			°C	

Fig.1 Forward Current Derating Curve

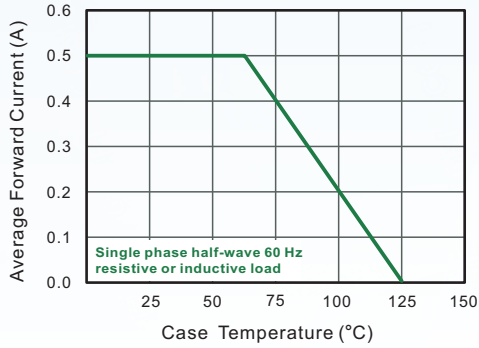


Fig.2 Typical Reverse Characteristics

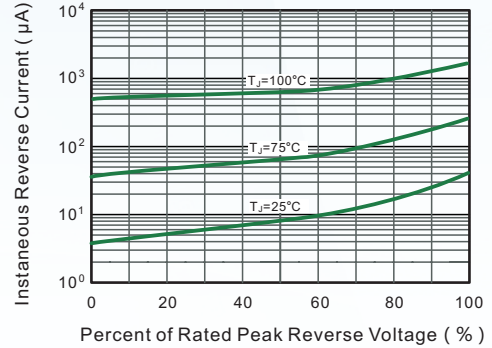


Fig.3 TYPICAL FORWARD VOLTAGE

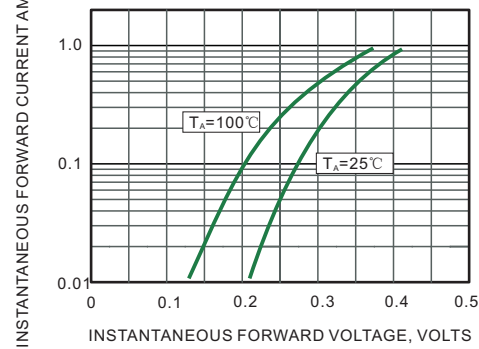


Fig.4 Typical Junction Capacitance

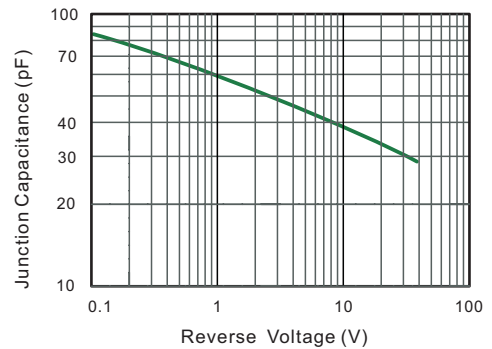


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

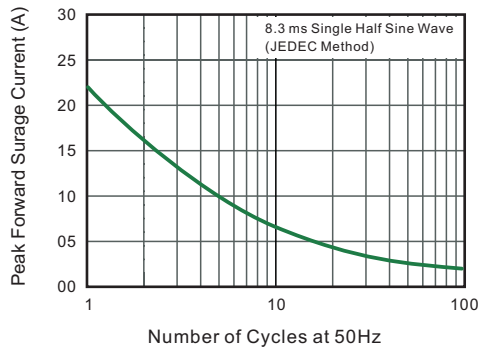
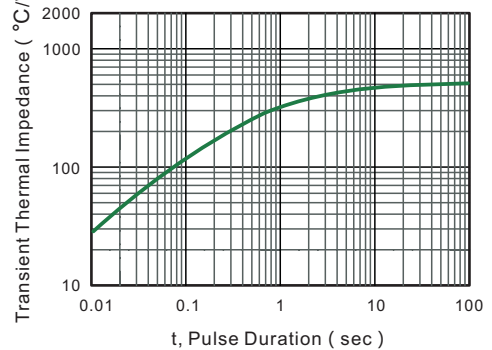


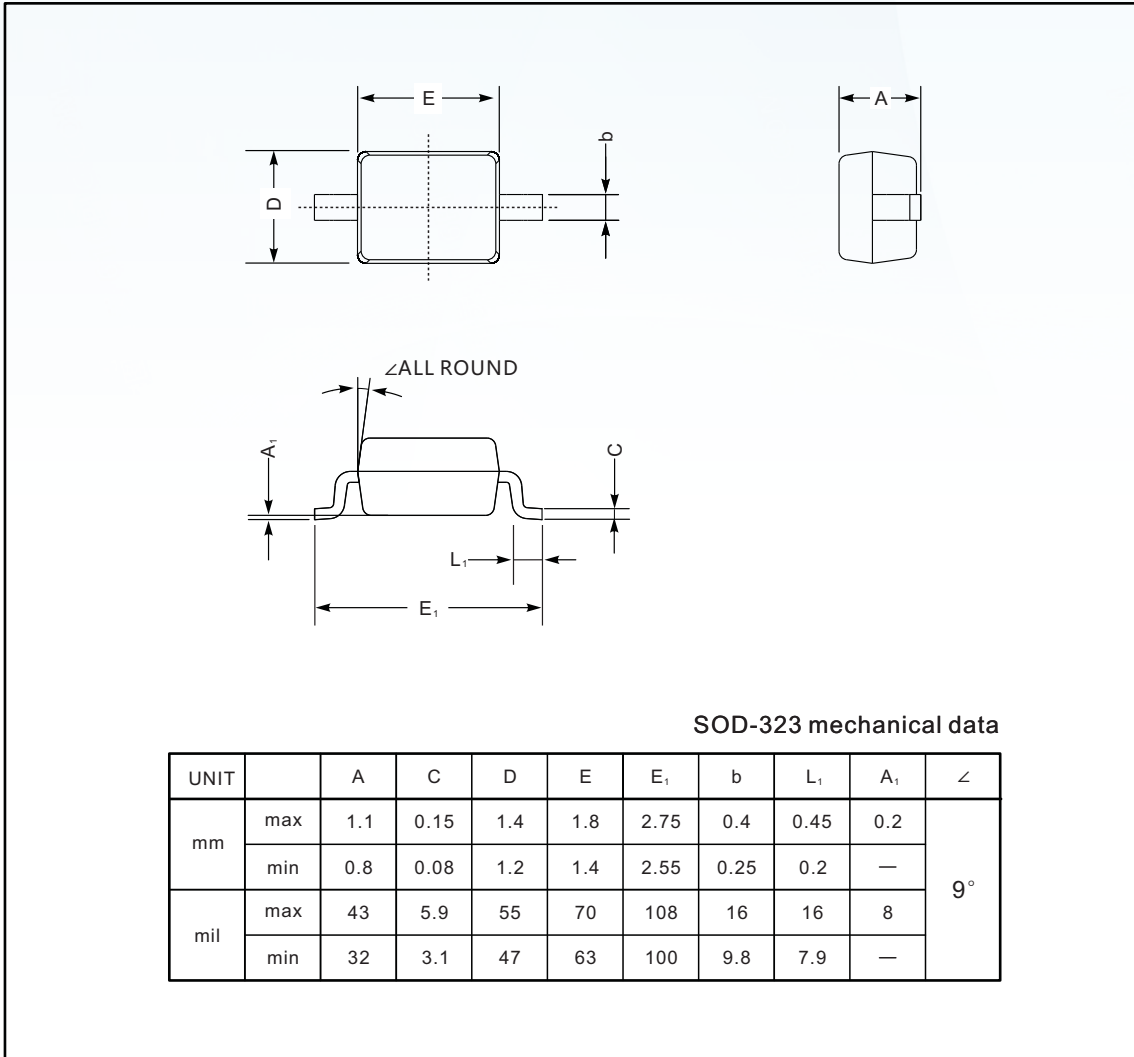
Fig.6 Typical Transient Thermal Impedance



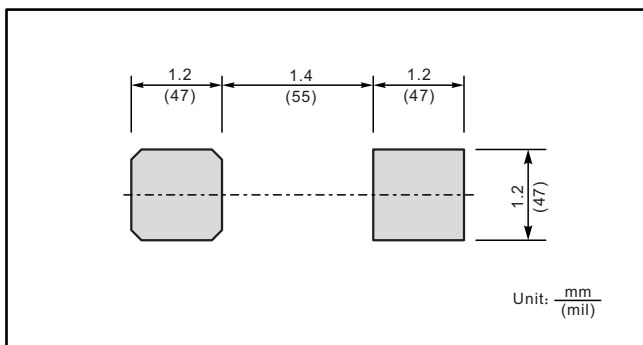
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



The recommended mounting pad size



Marking

Type number	Marking code
B0520WS	SD
B0530WS	SE
B0540WS	SF

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