

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

B2020WS-MS

Product specification




Features

- Low Forward Voltage Drop
- Very Small SMD Package

APPLICATIONS

- Low Voltage Rectification
- High Efficiency DC/DC Conversion
- Switch Mode Power Supply
- Inverse Polarity Protection
- Low Power Consumption Applications

Reference News

PACKAGE OUTLINE	PIN Configuration	MARKING
		
SOD-323		

MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{RRM}	Peak Repetitive Reverse Voltage	20	V
V _{RWM}	Working Peak Reverse Voltage		
V _{R(RMS)}	RMS Reverse Voltage	14	V
I _F	Continuous Forward Current	2	A
I _{FSM}	Non-repetitive Peak Forward Surge Current @ t=8.3ms	9	A
P _D	Power Dissipation Note1	250	mW
	Note2	480	
R _{θJA}	Thermal Resistance from Junction to Ambient Note1	400	°C/W
	Note2	208	
T _j	Operating Junction Temperature Range	-40 ~ +125	°C
T _{stg}	Storage Temperature Range	-55 ~ +150	°C

1:Device mounted on an FR4 PCB, single-sided copper, tin-plated and standard footprint.

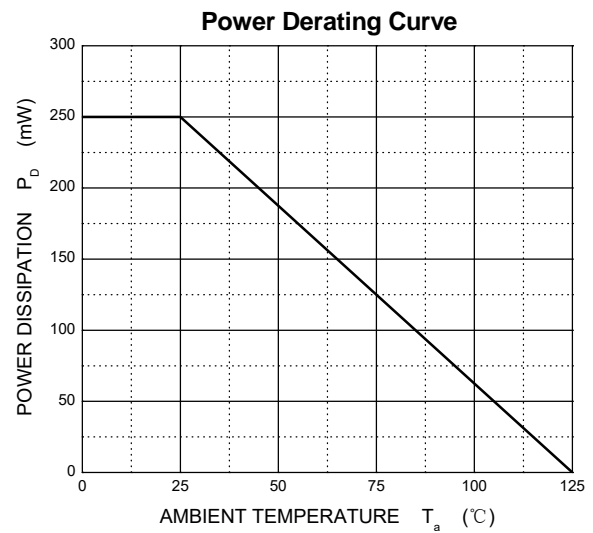
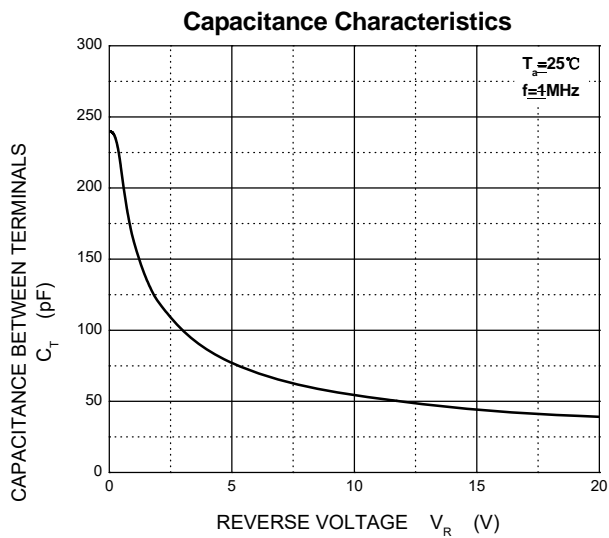
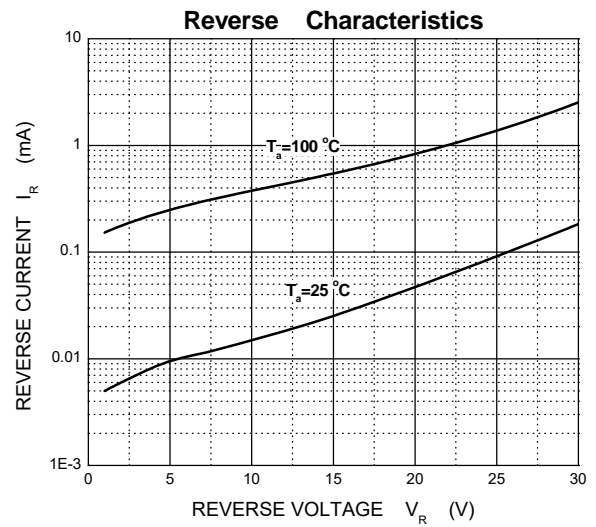
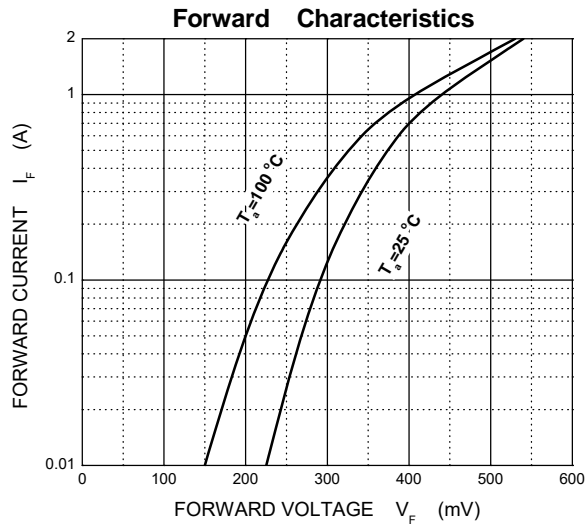
2.Device mounted on an FR4 PCB with copper pad 10 x 10 mm.

ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)

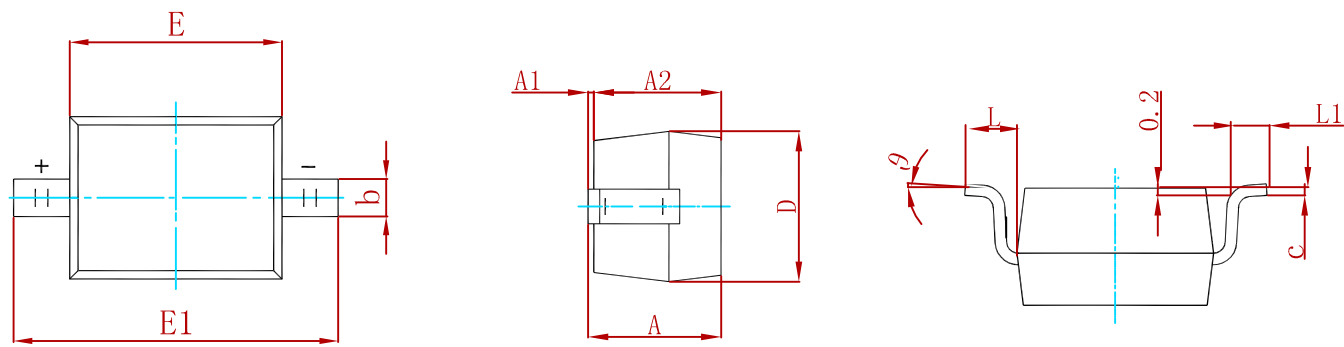
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V _(BR)	I _R =1mA	20			V
Reverse current	I _R	V _R =10V			80	μA
		V _R =20V			100	
Forward voltage	V _F *	I _F =1A			0.45	V
		I _F =2A			0.55	
Total capacitance	C _{tot}	V _R =4V,f=1MHz			120	pF

*Pulse test: t_p ≤ 300 μs; δ ≤ 0.02.

Typical Characteristics

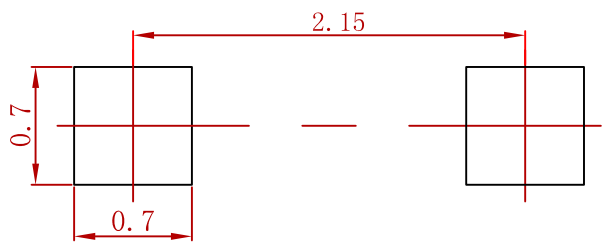


PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475 REF.		0.019 REF.	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
B2020WS-MS	SOD-323	3000

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