

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

MS2A40LWS

Product specification

FEATURES

- Low Forward Voltage Drop
- Extremely Small SOD-323 Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Band Indicates Cathode
- Tape and reel: 3,000Pcs/ 7" reel

APPLICATIONS

- Low voltage rectification
- Reverse polarity protection
- Low power consumption applications

Reference News

PACKAGE OUTLINE	Marking
	
SOD-323	

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

Symbol	Parameter	Value	Units
VRRM	Maximum repetitive reverse voltage	40	V
VR	Maximum DC blocking reverse voltage	40	V
IF(AV)	Average Forward Current	2	A
IFSM	Peak Forward Surge Current (At 8.3ms single half sine-wave)	20	A
TJ	Operating Junction Temperature	-50 to +125	°C
TSTG	Storage Temperature Range	-50 to +150	°C

These ratings are limiting values above which the serviceability of the diode may be impaired.

ELECTRICAL CHARACTERISTICS (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Breakdown Voltage at IR=0.1mA	VBR	40			V
Reverse Leakage Current at VR=40V	IR			80	μA
Forward Voltage at IF=1A	VF		0.37	0.42	V
Forward Voltage at IF=2A	VF			0.50	V
Junction Capacitance VR = 0V, f = 1MHz	CJ		340	400	pF

ELECTRICAL CHARACTERISTICS CURVE

Fig 1 Typical Forward Current Derating Curve

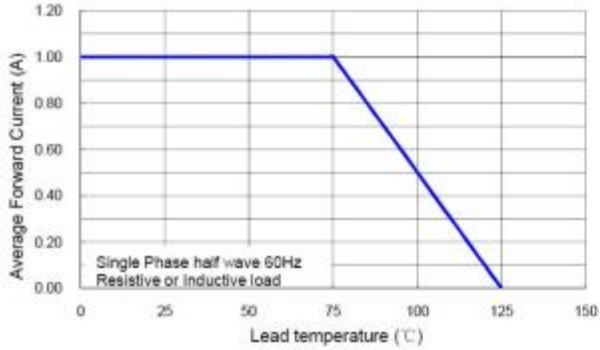


Fig 2 Total Capacitance vs. Reverse Voltage

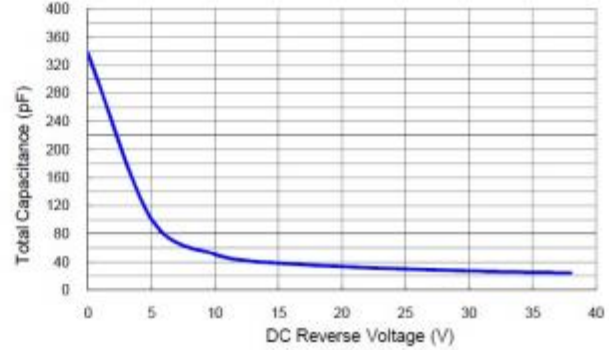


Fig 3 Typical Instantaneous Forward Characteristics

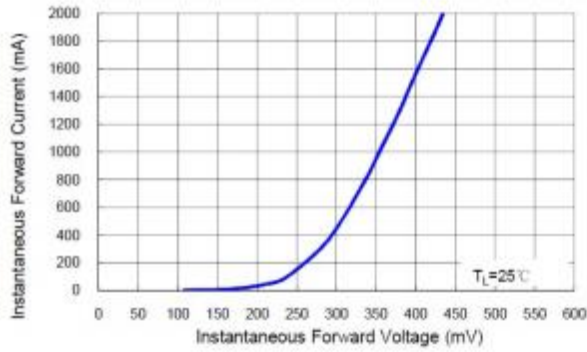
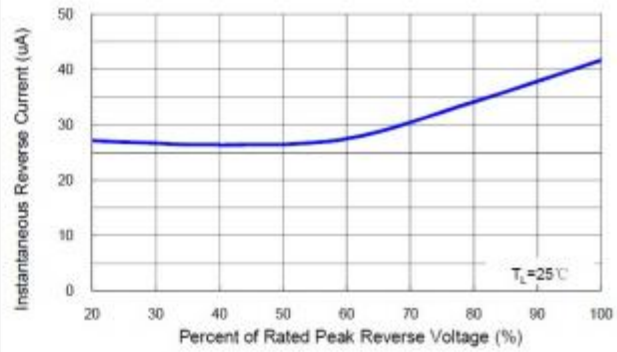
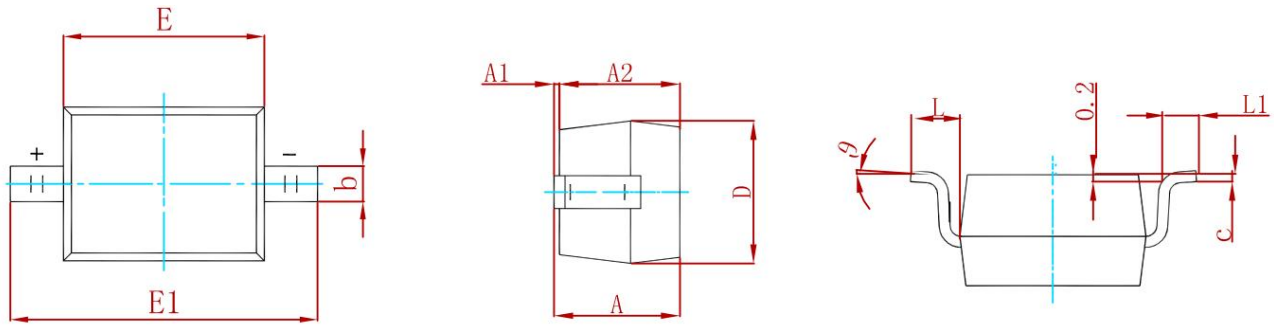


Fig 4 Typical Reverse Characteristics

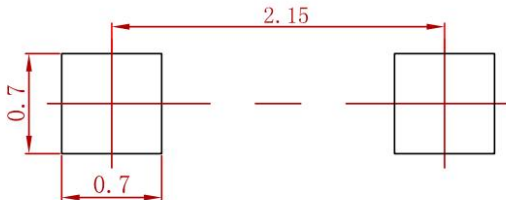


PACKAGE MECHANICAL DATA



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.	
e	0°	8°	0°	8°

Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
MS2A40LWS	SOD-323	3000

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