

# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

## MS05A40LWT

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Product specification

## FEATURES



- Low Forward Voltage Drop
- Extremely Small SOD-523 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

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## Reference News

PACKAGE OUTLINE	Marking
	
SOD-523	

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

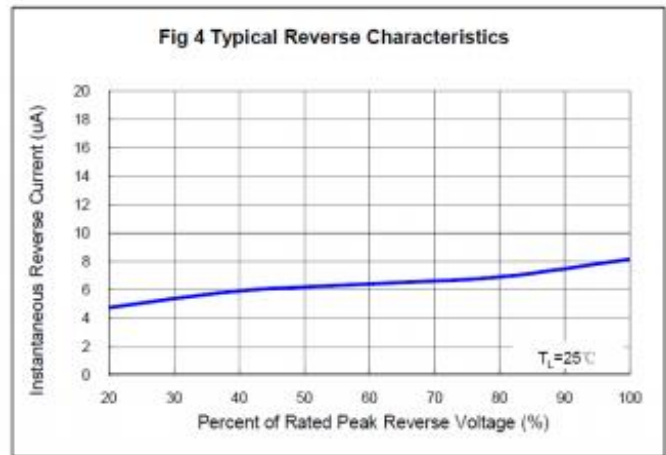
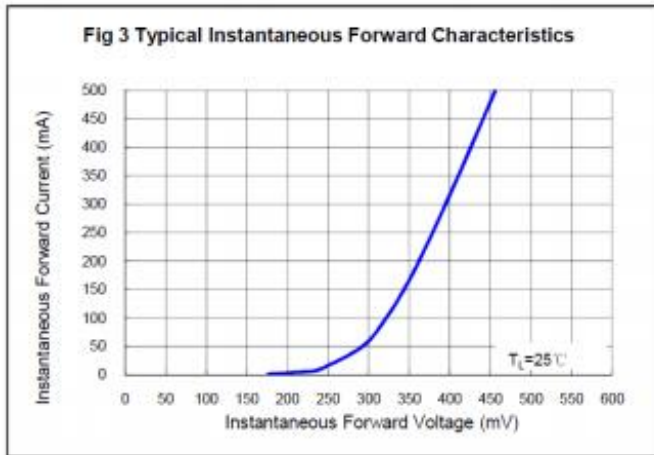
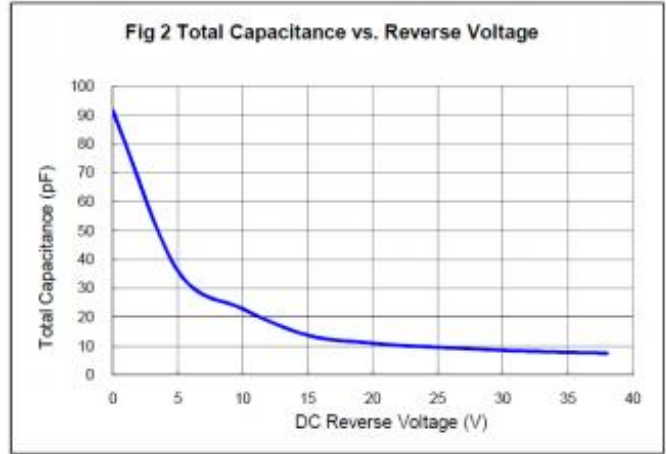
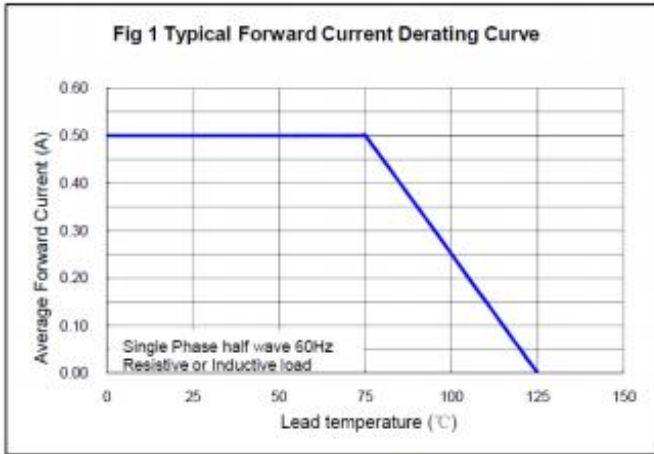
Symbol	Parameter	Value	Units
VRRM	Maximum repetitive reverse voltage	40	V
VR	Maximum DC blocking reverse voltage	40	V
IF(AV)	Average Forward Current	500	mA
IFSM	Peak Forward Surge Current (At 8.3ms single half sine-wave)	5	A
TJ	Operating Junction Temperature	-55 to +125	°C
TSTG	Storage Temperature Range	-55 to +150	°C

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

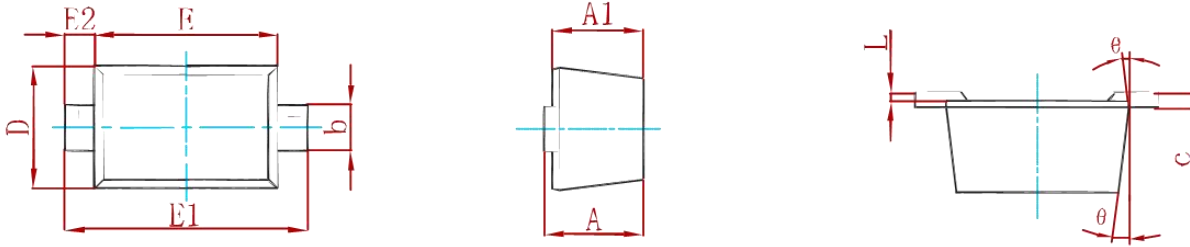
**ELECTRICAL CHARACTERISTICS (Ta=25°C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit
Breakdown Voltage at IR=100uA	VBR	40			V
Reverse Leakage Current at VR=20V	IR			50	μA
Reverse Leakage Current at VR=40V	IR			80	μA
Forward Voltage at IF=100mA	VF			0.37	V
Forward Voltage at IF=500mA	VF			0.50	V
Junction Capacitance VR = 5V, f = 1MHz	CJ		36		pF

**ELECTRICAL CHARACTERISTICS CURVE**

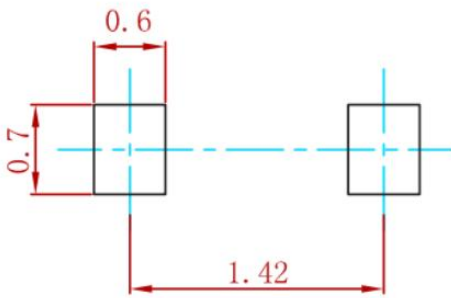


**PACKAGE MECHANICAL DATA**



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.510	0.770	0.020	0.031
A1	0.500	0.700	0.020	0.028
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.750	0.850	0.030	0.033
E	1.100	1.300	0.043	0.051
E1	1.500	1.700	0.059	0.067
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
g	7° REF		7° REF	

**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
MS05A40LWT	SOD-523	3000

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