

# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

## **SS32-MS THRU SS3200-MS**

**Product specification**


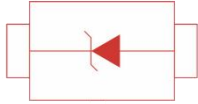
## Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250 °C/10 seconds at terminals







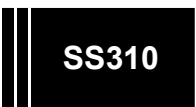
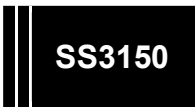

## MECHANICAL DATA

- Case : JEDEC DO-214AC/SMA molded plastic body
- Terminals : Solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end Mounting
- Position: Any
- Weight : 0.0018 ounce, 0.064 grams

## Reference News

DO-214AC/SMA	Schematic Diagram
	

## Marking

SS32-MS	SS33-MS	SS34-MS	SS35-MS	SS36-MS
				
SS38-MS	SS310-MS	SS3150-MS	SS3200-MS	
				

## Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	SS32 -MS	SS33 -MS	SS34 -MS	SS35 -MS	SS36 -MS	SS38 -MS	SS310 -MS	SS3150 -MS	SS3200 -MS	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	150	200	V
Maximum average forward rectified current at TL(see fig.1)	I <sub>(AV)</sub>	3.0									A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	80									A
Maximum instantaneous forward voltage at 3.0A	V <sub>F</sub>	0.55			0.70		0.85			0.95	V
Maximum DC reverse current      T <sub>A</sub> =25℃ at rated DC blocking voltage      T <sub>A</sub> =125℃	I <sub>R</sub>	0.5					0.3				mA
		5					3.0				
Typical junction capacitance (NOTE 1)	C <sub>J</sub>	250			180						pF
Typical thermal resistance (NOTE 2)	R <sub>θJA</sub>	70									℃/W
Operating junction temperature range	T <sub>J</sub>	-55 to +125									℃
Storage temperature range	T <sub>STG</sub>	-55 to +150									℃

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

## Typical Characteristics

Fig.1 Forward Current Derating Curve

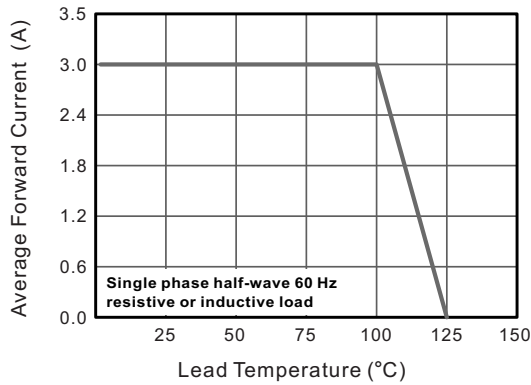


Fig.2 Typical Reverse Characteristics

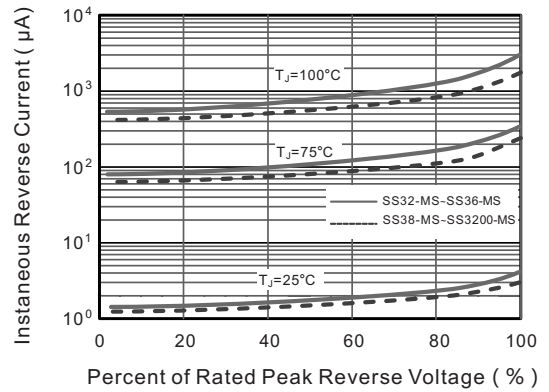


Fig.3 Typical Forward Characteristic

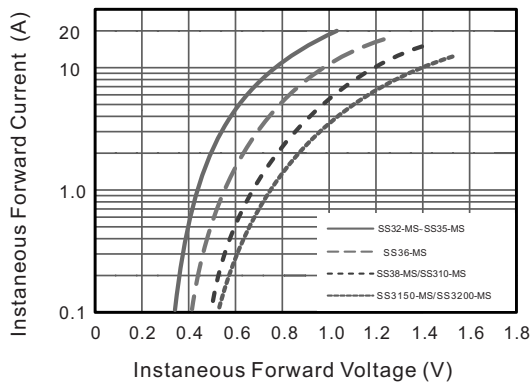


Fig.4 Typical Junction Capacitance

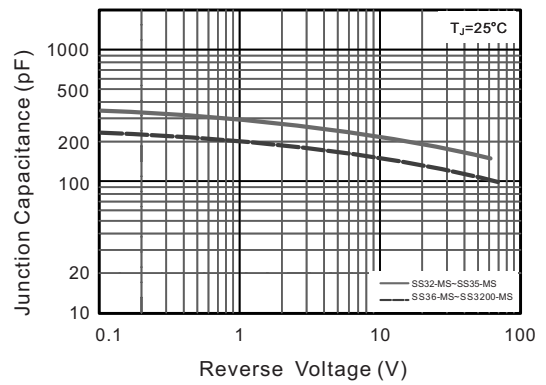


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

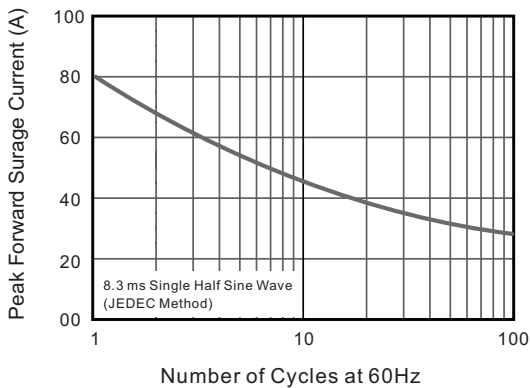
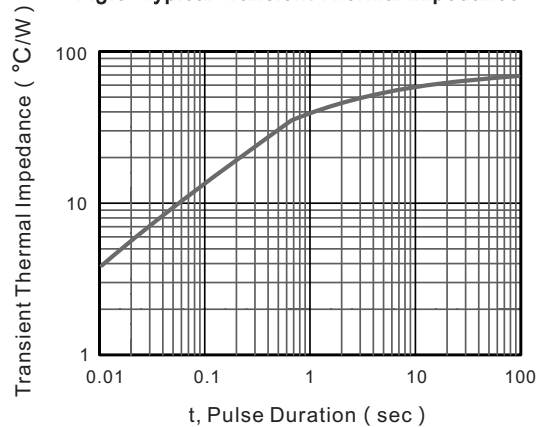
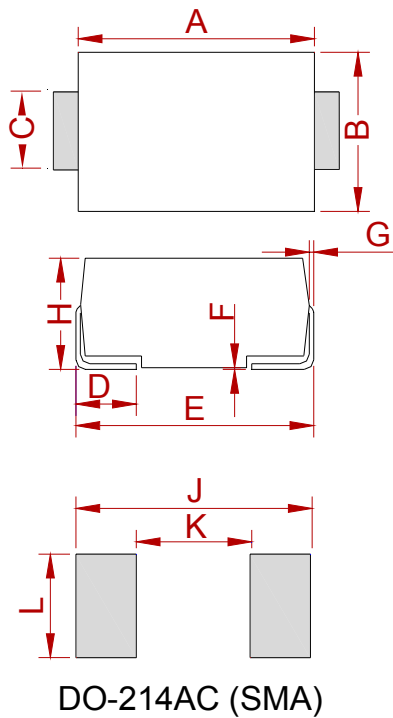


Fig.5- Typical Transient Thermal Impedance



**PACKAGE MECHANICAL DATA**



Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.25	4.65	0.167	0.183
B	2.50	2.90	0.098	0.114
C	1.35	1.65	0.053	0.065
D	0.76	1.52	0.030	0.060
E	4.93	5.28	0.194	0.208
F	0.051	0.203	0.002	0.008
G	0.15	0.31	0.006	0.012
H	1.98	2.41	0.078	0.095
J	6.50		0.256	
K		2.30		0.090
L	1.70		0.067	

**REEL SPECIFICATION**

P/N	PKG	QTY
SS32-MS THRU SS3200-MS	SMA(DO-214AC)	2000

### Attention

■ Any and all MSKSEMI Semiconductor products described or contained herein do not have specifications that can handle applications that require extremely high levels of reliability, such as life-support systems, aircraft's control systems, or other applications whose failure can be reasonably expected to result in serious physical and/or material damage. Consult with your MSKSEMI Semiconductor representative nearest you before using any MSKSEMI Semiconductor products described or contained herein in such applications.

■ MSKSEMI Semiconductor assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specification of any and all MSKSEMI Semiconductor products described or contained herein.

■ Specifications of any and all MSKSEMI Semiconductor products described or contained herein stipulate the performance, characteristics, and functions of the described products in the independent state, and are not guarantees of the performance, characteristics, and functions of the described products as mounted in the customer's products or equipment. To verify symptoms and states that cannot be evaluated in an independent device, the customer should always evaluate and test devices mounted in the customer's products or equipment.

■ MSKSEMI Semiconductor strives to supply high-quality high-reliability products. However, any and all semiconductor products fail with some probability. It is possible that these probabilistic failures could give rise to accidents or events that could endanger human lives, that could give rise to smoke or fire, or that could cause damage to other property. When designing equipment, adopt safety measures so that these kinds of accidents or events cannot occur. Such measures include but are not limited to protective circuits and error prevention circuits for safe design, redundant design, and structural design.

■ In the event that any or all MSKSEMI Semiconductor products (including technical data, services) described or contained herein are controlled under any of applicable local export control laws and regulations, such products must not be exported without obtaining the export license from the authorities concerned in accordance with the above law.

■ No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or any information storage or retrieval system, or otherwise, without the prior written permission of MSKSEMI Semiconductor.

■ Information (including circuit diagrams and circuit parameters) herein is for example only ; it is not guaranteed for volume production. MSKSEMI Semiconductor believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringement of intellectual property rights or other rights of third parties.

■ Any and all information described or contained herein are subject to change without notice due to product/technology improvement, etc. When designing equipment, refer to the "Delivery Specification" for the MSKSEMI Semiconductor product that you intend to use.