

# MSKSEMI 美森科

SEMICONDUCTOR



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## **SM320A-MS THRU SM3100A-MS**

**Product specification**

## Features

- For Surface Mounted Applications
- High Temperature Metallurgically Bonded Contacts
- Plastic Material - UL Flammability Classification 94V-0
- High Reliability
- High Current Capability and Low VF
- Submersible Temperature of 265C for 10 Seconds in Solder Bath

## MECHANICAL DATA

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Weight: 0.064 grams (approx.)

## Reference News

### PACKAGE OUTLINE



SMA(DO-214AC)

## Marking

SM320A-MS	SM330A-MS	SM340A-MS	SM350A-MS
SM360A-MS	SM380A-MS	SM390A-MS	SM3100A-MS

## Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	SM320A-MS	SM330A-MS	SM340A-MS	SM350A-MS	SM360A-MS	SM380A-MS	SM390A-MS	SM3100A-MS	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	20	30	40	50	60	80	90	100	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	14	21	28	35	42	56	64	71	V
Average Rectified Output Current @T <sub>L</sub> = 105°C	I <sub>O</sub>	3.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	100								A
Forward Voltage @I <sub>F</sub> = 3.0A	V <sub>FM</sub>	0.55			0.75		0.85			V
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C	I <sub>RM</sub>	2.0 20								mA
Typical Thermal Resistance (Note 1)	R <sub>θJL</sub> R <sub>θJA</sub>	10 50								°C/W
Operating Temperature Range	T <sub>j</sub>	-65 to +125								°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150								°C

Note: 1. Mounted on P.C. Board with 8.0mm<sup>2</sup> copper pad area.

# RATINGS AND CHARACTERISTIC CURVES SM320A-MS THRU SM3100A-MS

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

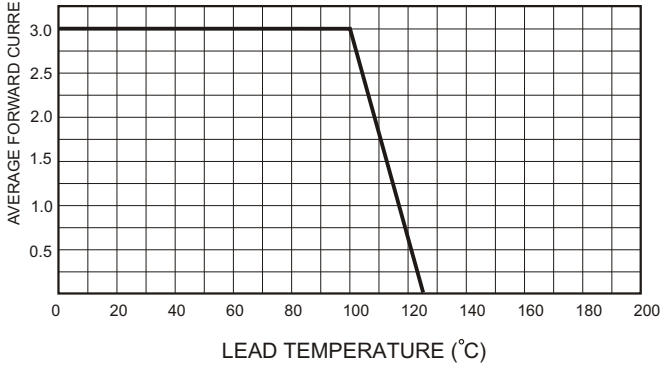


FIG.2-TYPICAL FORWARD CHARACTERISTICS

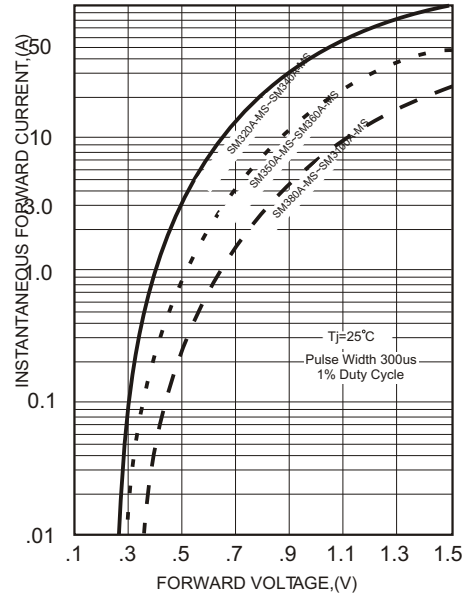


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

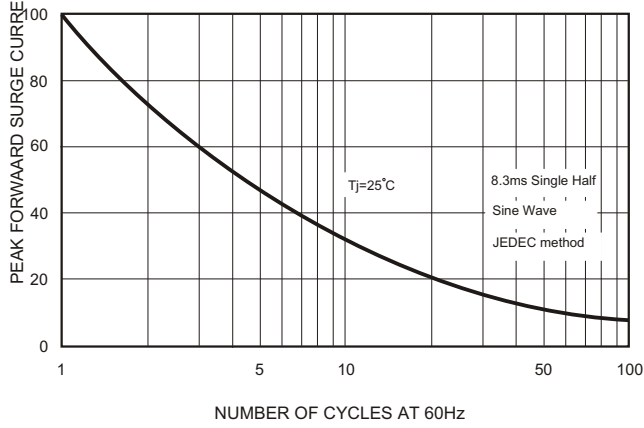


FIG.4-TYPICAL JUNCTION CAPACITANCE

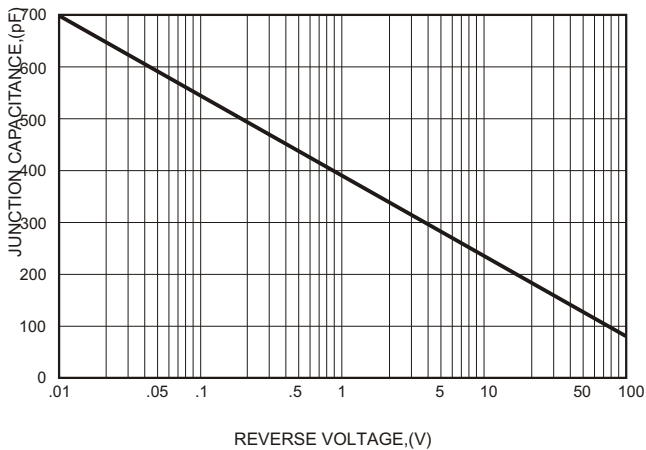
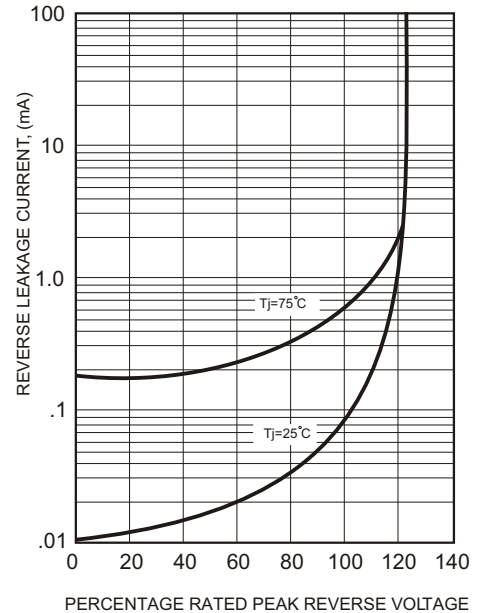
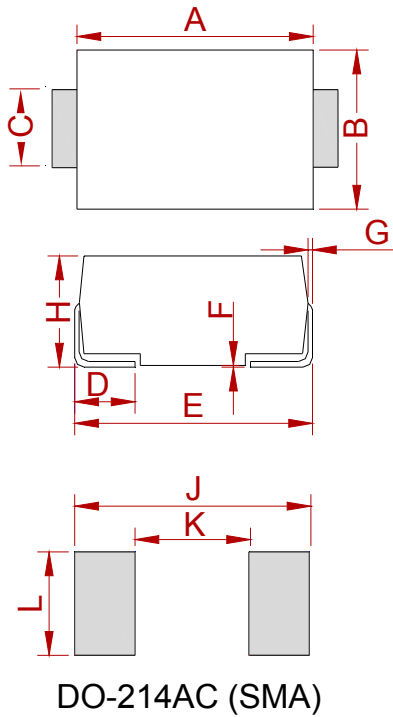


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



**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
SM320A-MS THRU SM3100A-MS	SMA(DO-214AC)	7500

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