

Surface Mount Glass Passivated Rectifiers

Reverse Voltage - 1000 Volts Forward Current - 1.0 Amperes

Features

- For surface mounted applications
- Low reverse leakage current
- Low forward voltage drop
- High surge capacity
- Meet UL flammability classification 94V-0

Mechanical Data

- Case: JEDEC A-SMA molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any

Applications

 For use in low voltage, high frequency inverters, polarity protection applications

A-SMA

.087 (2.21)

.050 (1.27)

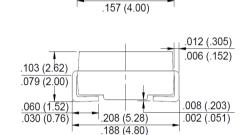


114 (2.90)

.098 (2.50)







181 (4.60)

Package Outline Dimensions in Inches (Millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25 $^{\circ}$ C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

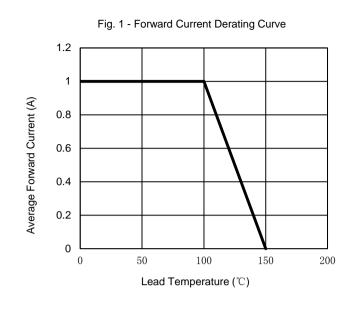
For capacitive load, derate current by 20%.

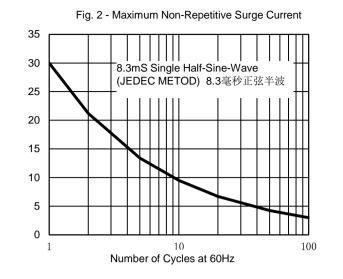
Characteristics	Symbol	S1M	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	1000	V
Maximum RMS Voltage	VRMS	700	V
Maximum DC Blocking Voltage	VDC	1000	V
Maximum Average Forward Rectified Current @TL=100 $^{\circ}$ C	I(AV)	1.0	А
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave,	IFSM	30	А
Superimposed on Rated Load (JEDEC Method)	IFSIVI		A
I ² t Rating for Fusing (t<8.3mS)	l ² t	3.7	A ² s
Peak Forward Voltage at 1.0A DC (Note1)	VF	1.1	V
Maximum DC Reverse Current @TJ=25°C	IR	5.0	uA
at Rated DC Blocking Voltage @T $_{ m J}$ =100 $^{\circ}{ m C}$	IK	100	uA
Typical Junction Capacitance (Note 2)	Cl	10	pF
Typical Thermal Resistance Junction to Case	Rejc	30	°C/W
Operating Junction Temperature Range	TJ	-55 to+150	$^{\circ}$
Storage Temperature Range	Тѕтс	-55 to+150	℃

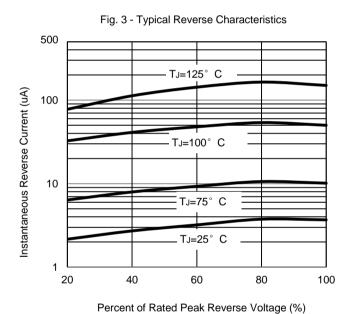
Notes: 1. 300uS pulse width, 2%duty cycle. 300uS

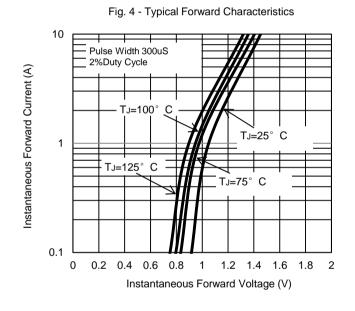
- 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
- 3. The typical data above is for reference only.

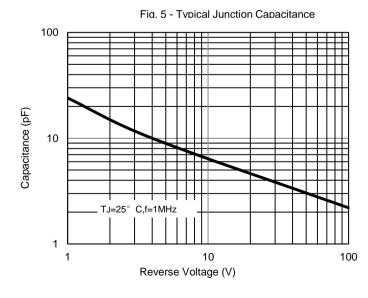












Peak Forward Surge Current (A)

The curve above is for reference only.

M7A-13-00-M003-BC034 Rev. 1, 12-Aug-2019



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