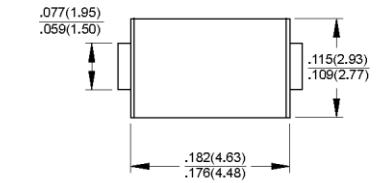
SN1A-S thru SN1M-S

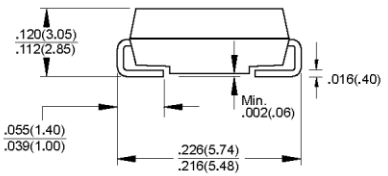
1.0 Amp. Surface Mount Glass Passivated Rectifiers
Voltage Range 50 to 1000 Volts Forward Current 1.0 Ampere

Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief, ideal for automated placement
- Easy pick and place
- High temperature soldering: 260°C/10 seconds at terminals

DO-214AC (SMAJ)





Dimensions in inches and (millimeters)

Mechanical Data

- Case: New SMA molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.004 ounce, 0.115 gram

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, derate current by 20%

Parameter	Symbols	SN1A-S	SN1B-S	SN1D-S	SN1G-S	SN1J-S	SN1K-S	SN1M-S	Units
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current See Fig.1	$I_{(AV)}$	1.0							Amp
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0							Amps
Maximum instantaneous forward voltage @ 1.0A	V_F	1.1							Volts
Maximum DC reverse current @ T_A=25°C at rated DC blocking voltage @ T_A=100°C	I_R	5.0 100							uA uA
Maximum reverse recovery time (Note 1)	t_{rr}	2.0							uS
Typical junction capacitance (Note 2)	C_J	15							pF
Operating temperature range	T_J	-55 to +125							°C
Storage temperature range	T_{STG}	-55 to +150							°C

Notes: 1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
2. Measured at 1 MHz and Applied V_R=4.0 Volts

RATINGS AND CHARACTERISTIC CURVES

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

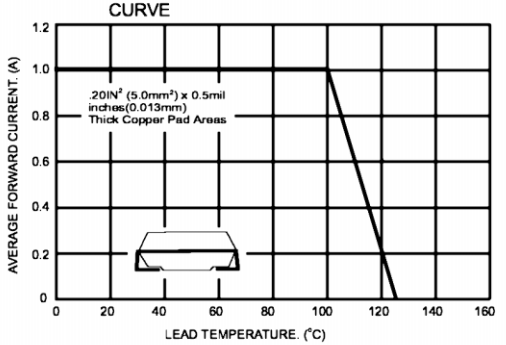


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

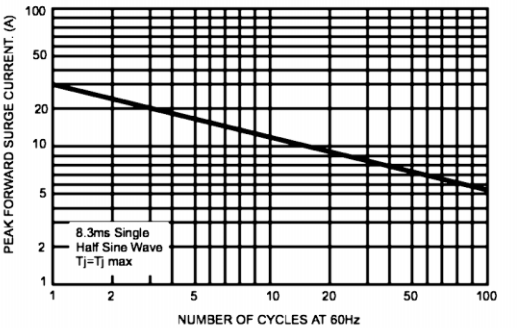


FIG.3- TYPICAL FORWARD CHARACTERISTICS

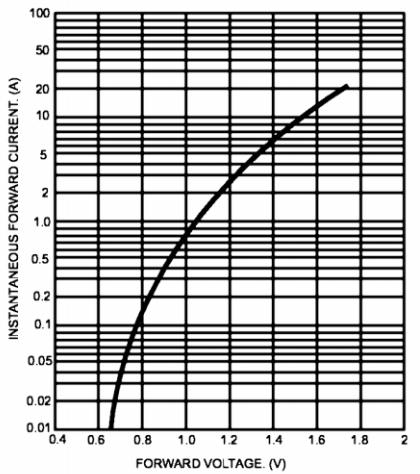


FIG.4- TYPICAL REVERSE CHARACTERISTICS

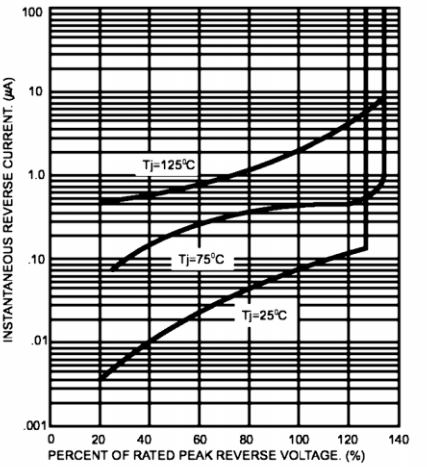
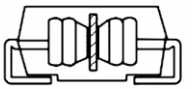


Figure :
New SMA Assembly



Round Lead
Process

FIG.5- TYPICAL JUNCTION CAPACITANCE