

**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 1.0 A**

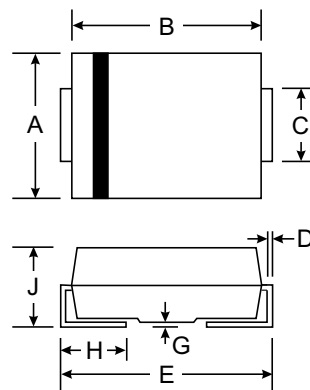
### Features

- Diffused junction
- For surface mounted applications
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0



### Mechanical Data

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



SMA(DO-214AC)		
Dim	Min	Max
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

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

Characteristic	Symbol	SM4001A	SM4002A	SM4003A	SM4004A	SM4005A	SM4006A	SM4007A	Unit
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ T <sub>L</sub> =100 °C	I <sub>(AV)</sub>	1.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I <sub>FSM</sub>	30							A
Maximum Forward Voltage at 1.0A DC	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ T <sub>J</sub> =25°C @ T <sub>J</sub> =100°C	I <sub>R</sub>	5.0 100							uA
Typical Junction Capacitance (Note1)	C <sub>J</sub>	10							pF
Typical Thermal Resistance (Note2)	R <sub>JC</sub>	30							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +125							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +125							°C

NOTES:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

2.Thermal resistance junction to lead.

FIG. 1 - FORWARD CURRENT DERATING CURVE

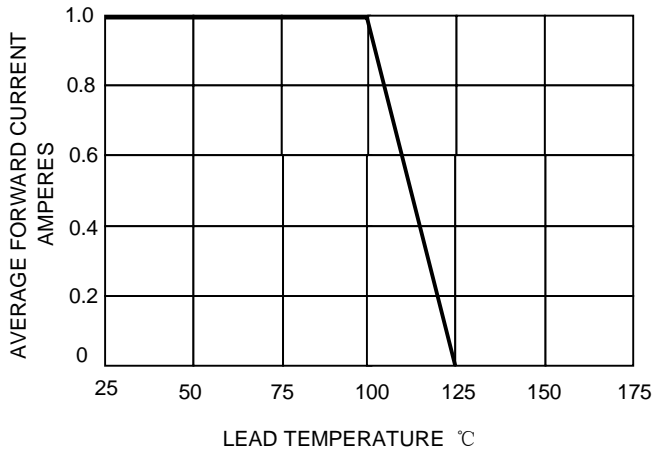


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

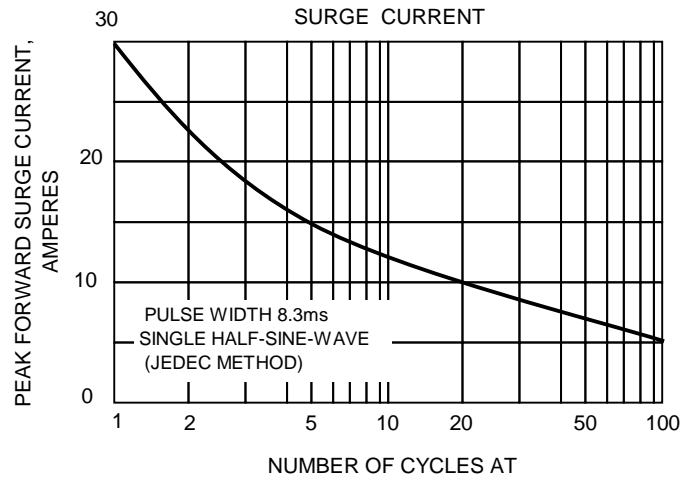


FIG.3-TYPICAL FORWARD CHARACTERISTICS

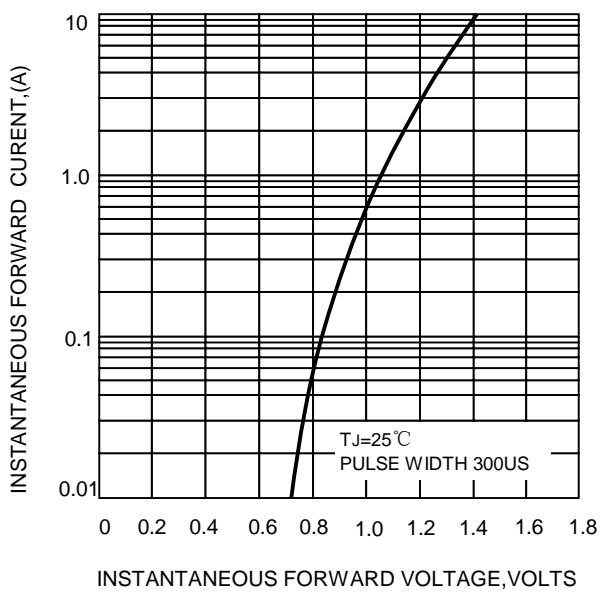


FIG.4-TYPICAL REVERSE CHARACTERISTICS

