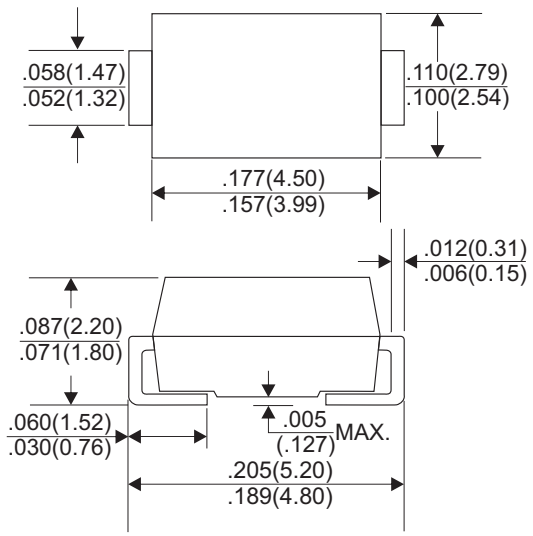
SM4001A THRU SM4007A

SUFACE MOUNT GENERAL PURPOSE SILICON RECTIFIERS

Reverse Voltage - 50 to 1000 Volts **Forward Current -** 1.0 Ampere

DO-214AC(SMA)



Dimensions in inches and (millimeters)

FEATURES

* Glsaa passivate device
* Ideal for surface mouted applications
* Low reverse leakage
* Metallurgically bonded construction
* High temperature soldering guaranteed: 250°C/10 seconds 0.375"(9.5mm)lead lenght, 5 ibs.(2.3kg) tension

MECHANICAL DATA

* Case: JEDEC SMA molded plastic
* Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
* Polarity: Color band denotes cathode end
* Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25℃ ambient temperature uniess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SM4001A	SM4002A	SM4003A	SM4004A	SM4005A	SM4006A	SM4007A	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Ta=75℃	1.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	30							A
Maximum Instantaneous Forward Voltage at 1.0A	1.1							V
Maximum DC Reverse Current Ta=25℃	5.0							μA
at Rated DC Blocking Voltage Ta=100℃	50							μA
Typical Junction Capacitance (Note 1)	15							pF
Typical Thermal Resistance RθJA (Note 2)	50							℃/W
Operating and Storage Temperature Range T_J, T_{STG}	-65 — +175							℃
Marking Code	4001	4002	4003	4004	4005	4006	4007	

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance from Junction to Ambient.

RATING AND CHARACTERISTIC CURVES (SM4001A THRU SM4007A)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

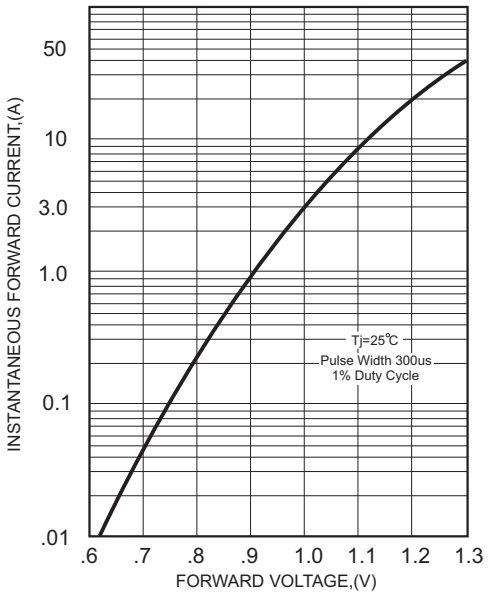


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

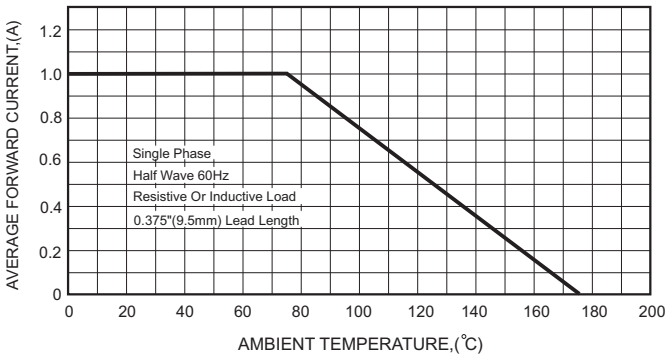


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

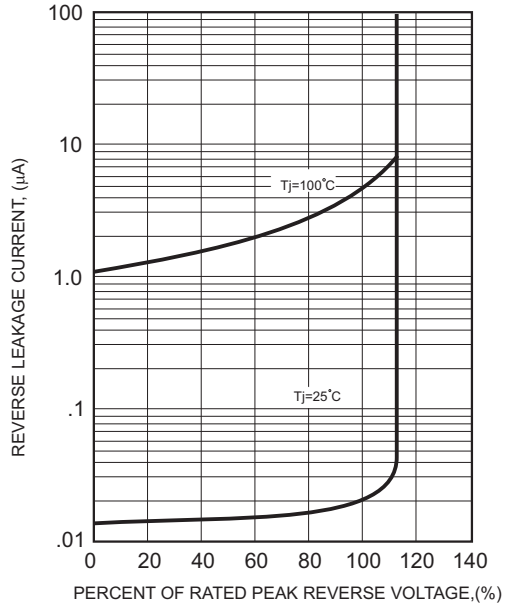


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

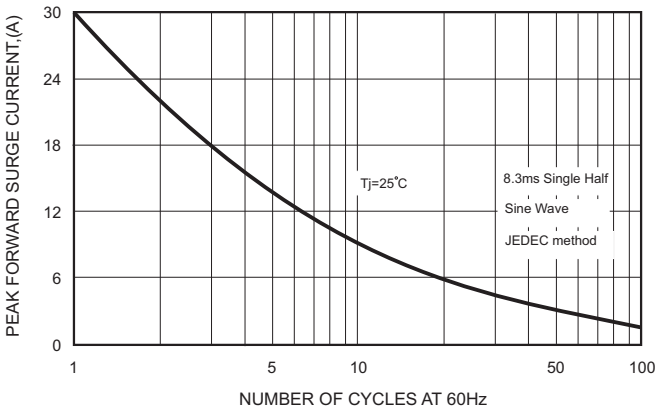


FIG.5-TYPICAL JUNCTION CAPACITANCE