CURRENT 4.0 Ampere
VOLTAGE RANG 50 to 1000 Volts

S4AC THRU S4MC

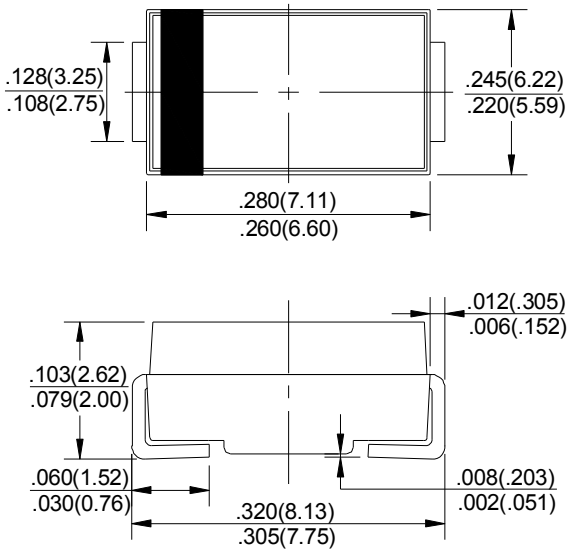
Features

- ✧ For surface mounted application
- ✧ Glass passivated junction chip.
- ✧ Low forward voltage drop
- ✧ High current capability
- ✧ Easy pick and place
- ✧ High surge current capability
- ✧ Plastic material used carries Underwriters Laboratory Classification 94V-0
- ✧ High temperature soldering: 260℃/10 seconds at terminals
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode.

Mechanical Data

- ✧ Case: Molded plastic
- ✧ Terminals: Pure tin plated, lead free.
- ✧ Polarity: Indicated by cathode band
- ✧ Packaging: 16mm tape per EIA STD RS-481
- ✧ Weight: 0.21 grams

DO-214AB/SMC



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

Type Number	Symbol	S4A	S4B	S4D	S4G	S4J	S4K	S4M	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T_L=75℃	$I_{F(AV)}$	4							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	100							A
Maximum Instantaneous Forward Voltage (Note 1) @ 4 A	V_F	1.15							V
Maximum DC Reverse Current @ T_A=25 ℃ at Rated DC Blocking Voltage @ T_A=125 ℃	I_R	10 250							uA uA
Typical Reverse Recovery Time (Note 2)	Trr	2.0							uS
Typical Junction Capacitance (Note 3)	Cj	60							pF
Typical Thermal Resistance	$R_{\theta JL}$ $R_{\theta JA}$	13 47							^{O}C/W
Operating Temperature Range	T_J	- 55 to + 150							^{O}C
Storage Temperature Range	T_{STG}	- 55 to + 150							^{O}C

Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle
2. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
3. Measured at 1 MHz and Applied V_R=4.0 Volts

CURRENT 4.0 Ampere
VOLTAGE RANG 50 to 1000 Volts

S4AC THRU S4MC

RATING AND CHRACTERISTIC CURVES S4A Thru S4M

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

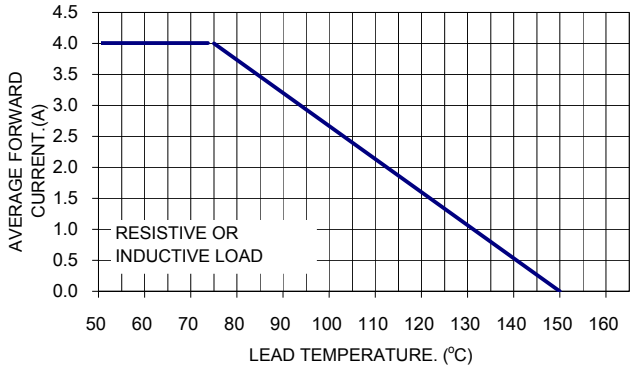


FIG.2- TYPICAL REVERSE CHARACTERISTICS

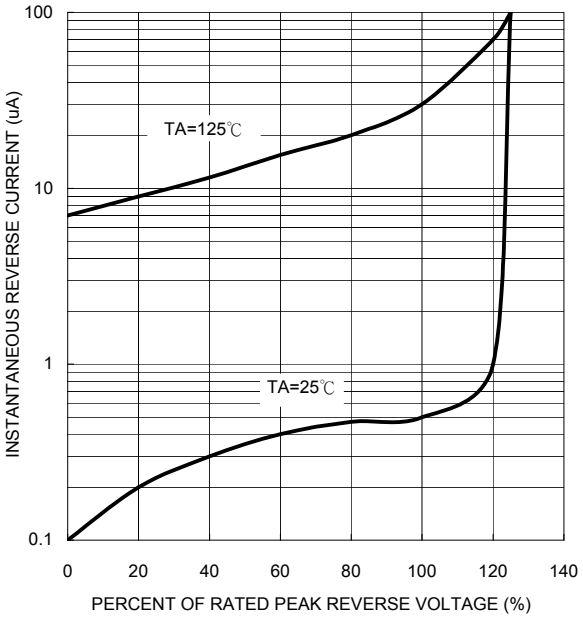


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

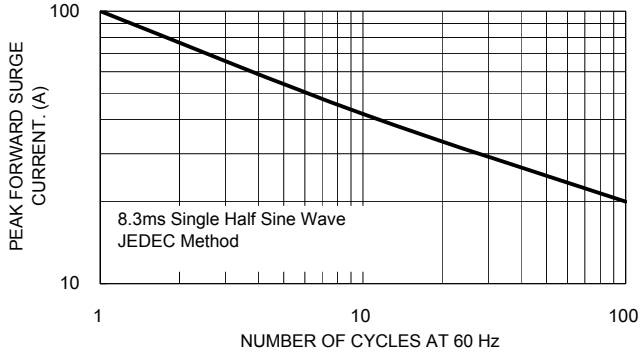


FIG.5- TYPICAL FORWARD CHARACTERISRICS

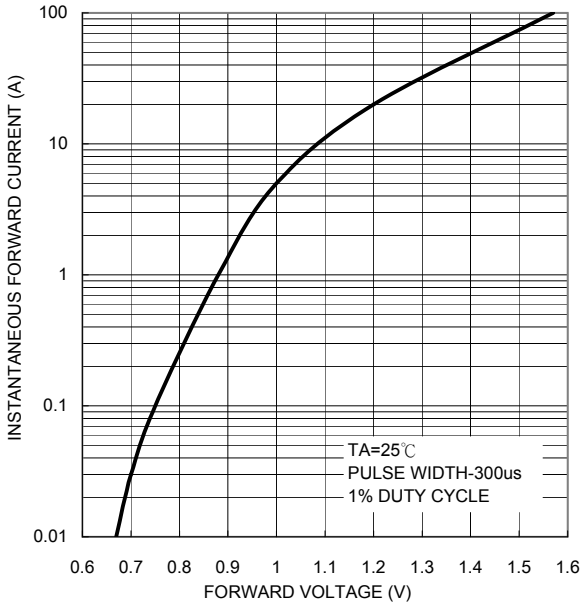


FIG.4- TYPICAL JUNCTION CAPACITANCE

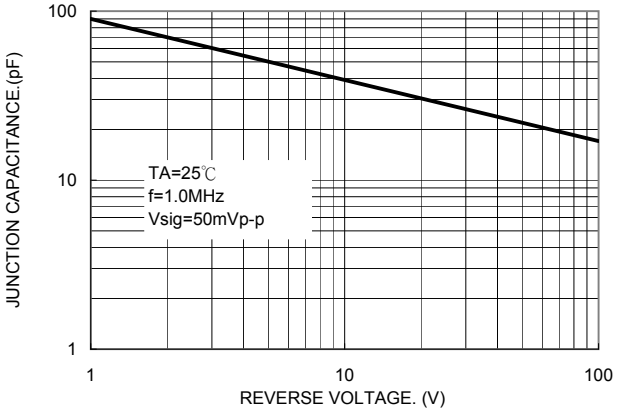


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

