

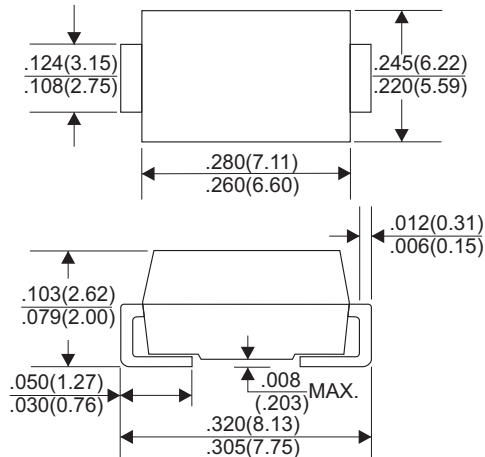


# S8AC THRU S8MC

## SURFACE MOUNT GENERAL PURPOSE SILICON RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 8.0 Ampere

### DO-214AB(SMC)



Dimensions in inches and (millimeters)

### FEATURES

- \* Glass passivate device
- \* Ideal for surface mounted applications
- \* Low reverse leakage
- \* Metallurgically bonded construction
- \* High temperature soldering guaranteed:  
250°C/10 seconds 0.375"(9.5mm)lead length,  
5 lbs.(2.3kg) tension

### MECHANICAL DATA

- \* Case: JEDEC SMC 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°C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

TYPE NUMBER	S8AC	S8BC	S8DC	S8GC	S8JC	S8KC	S8MC	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 at Ta=75°C	8							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	200							A
Maximum Instantaneous Forward Voltage at 8.0A	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0							µA
Typical Junction Capacitance (Note 1)	40							pF
Typical Thermal Resistance RθJL (Note 2)	8							°C/W
Operating and Storage Temperature Range Tj, Tstg	-65 — +150							°C
Marking code	S8A	S8B	S8D	S8G	S8J	S8K	S8M	

#### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Lead.

# RATING AND CHARACTERISTIC CURVES (S8AC THRU S8MC)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

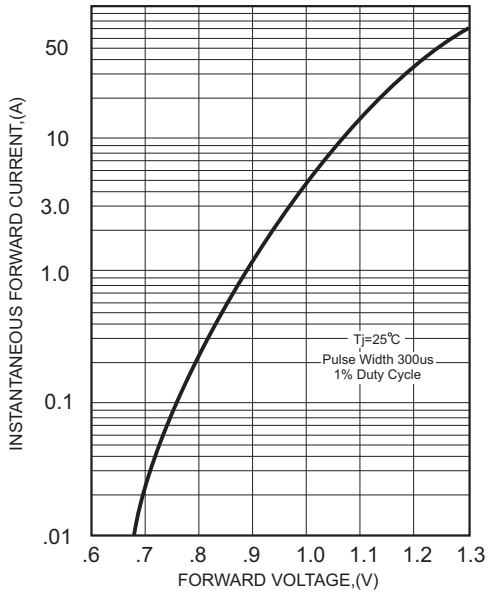


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

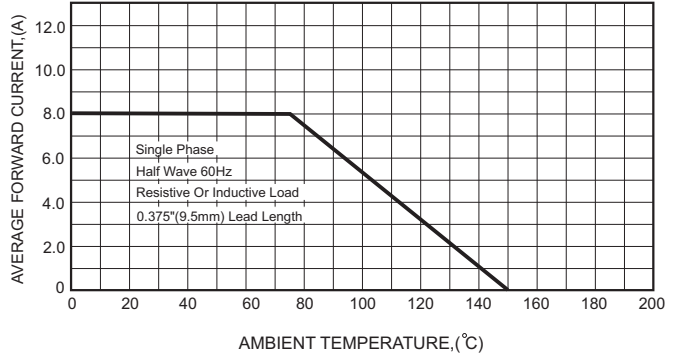


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

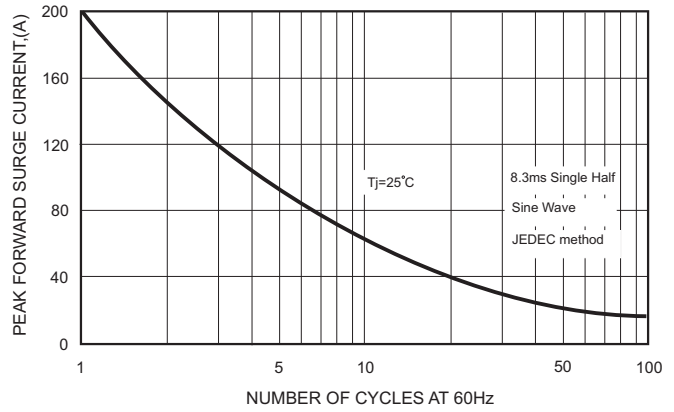


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

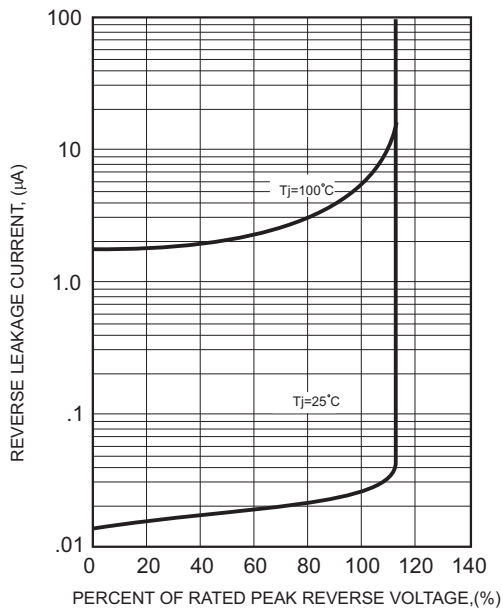


FIG.5-TYPICAL JUNCTION CAPACITANCE

