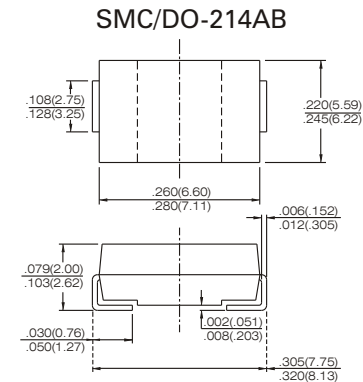
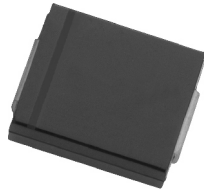


# S5AC thru S5MC

## SURFACE MOUNT GLASS PASSIVATED RECTIFIER

VOLTAGE - 50 TO 1000 VOLTS CURRENT - 5.0 AMPERES



Dimensions in inches and (millimeters)

### FEATURES

- Glass Passivated Die Construction
- Low Forward Voltage Drop and High Current Capability
- Surge Overload Rating to 100A Peak
- Ideally Suited for Automated Assembly

### MECHANICAL DATA

Case : Molded plastic  
 Case Molded UL flammability rating classification 94V-0  
 Moisture sensitivity : Level 1 per J-STD-020A  
 Terminals : Solder plated Terminal-solderable per MIL-SRD-202, Method 208  
 Polarity : Cathode band or cathode notch  
 Weight : 0.21grams (approx)  
 Ordering Information : See Page 2

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	S5AC	S5BC	S5DC	S5GC	S5JC	S5KC	S5MC	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
Average Rectified Output Current at $T_J = 75^\circ C$	$I_{(AV)}$	5.0							Amps
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	100							Amps
Forward Voltage @ $I_F = 5.0A$	$V_{FM}$	1.15							Volts
Maximum DC Reverse Current (NOTE 1) $T_A = 25^\circ C$ at Rated DC Blocking Voltage $T_A = 125^\circ C$	$I_R$	10 250							$\mu A$
Typical Thermal Resistance, Junction to Terminal (NOTE 2)	$C_J$	40							pF
Maximum Thermal Resistance (NOTE 2)	$R_{\theta JT}$	10							$^\circ C / W$
Operating and Storage Temperature Range	$T_J$ $T_{STG}$	-65 to +150							$^\circ C$

NOTES :

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
2. Thermal Resistance Junction to Terminal, unit mounted on PC board with 5.0mm<sup>2</sup> (0.013mm thick) copper pads as Heat Sink.

# S5AC thru S5MC

## SURFACE MOUNT GLASS PASSIVATED RECTIFIER

### RATINGS AND CHARACTERISTIC CURVES S5AC THRU S5MC

Fig. 1 Forward Current Derating Curve

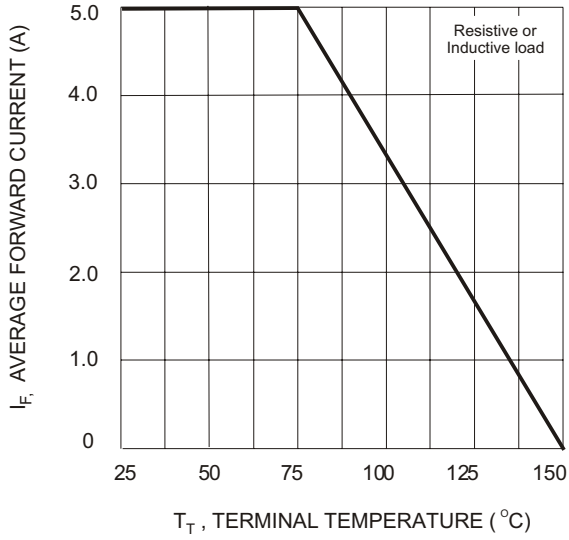


Fig. 2 Typical Forward Characteristics

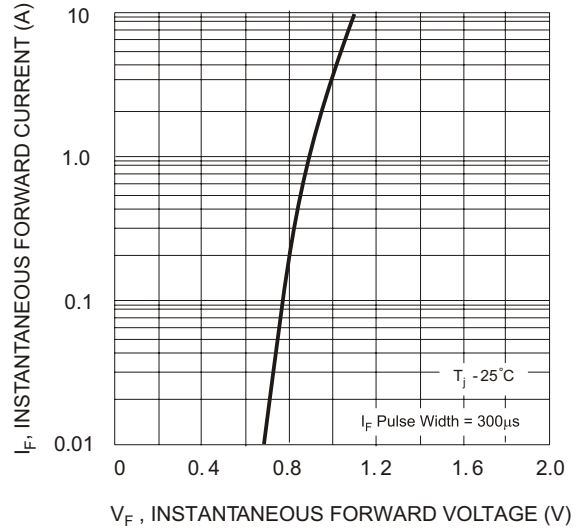


Fig. 3 Forward Surge Current Derating Curve

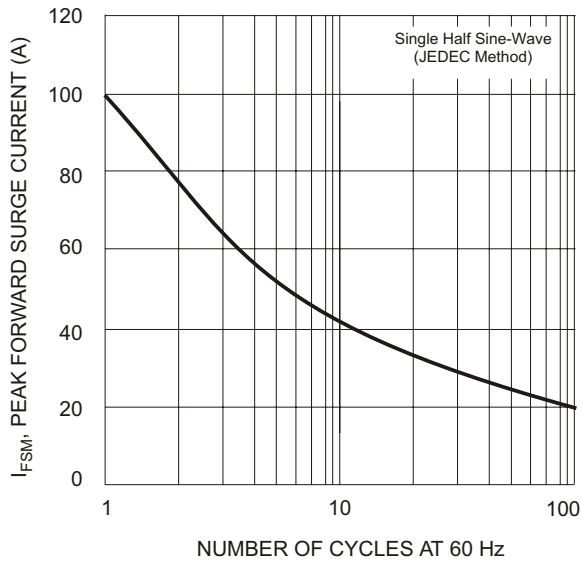


Fig. 4 Typical Reverse Characteristics

