

### **Features**

- Ideal for surface mount applications
- Easy pick and place
- Built-in strain reliefs
- Low forward voltage drop



## **SMC**

# Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)			
S5AC-S5MC	SMC	S5x	3000			





## Maxmim Ratings (Ta=25 unless otherwise noted)

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

Type Number	S5AC	S5BC	S5DC	S5GC	S5JC	S5KC	S5MC	Units
Maximum Recurrent Peak Reverse Voltage		100	200	400	600	800	1000	V
Maximum RMS Voltage		70	140	280	420	560	700	V
Maximum DC Blocking Voltage		100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current								
at Ta=75°C		5.0						
Peak Forward Surge Current, 8.3 ms single half sine-wave								
superimposed on rated load (JEDEC method)		120						
Maximum Instantaneous Forward Voltage at 5.0A		1.10						
Maximum DC Reverse Current Ta=25 ℃		5.0						
at Rated DC Blocking Voltage Ta=125℃	250							μА
Typical Junction Capacitance (Note1)		60						
Typical Thermal Resistance RθJL (Note 2)		13						
Operating and Storage Temperature Range Тл, Тsтс		-65 — +150						

#### NOTES:

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



## **Typical Characteristics**

FIG.1-TYPICAL FORWARD **CHARACTERISTICS** 50 INSTANTANEOUS FORWARD CURRENT,(A) 10 3.0 1.0 Tj=25°C Pulse Width 300us 1% Duty Cycle .6 1.2 1.3 .8 .9 1.0 1.1 FORWARD VOLTAGE,(V)

FIG.3 - TYPICAL REVERSE

CHARACTERISTICS

100

10

T<sub>j=25</sub>'C

1.0

80

PERCENT OF RATED PEAK REVERSE VOLTAGE,(%)

100 120

#### FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

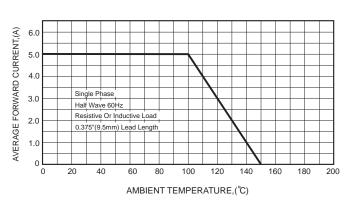
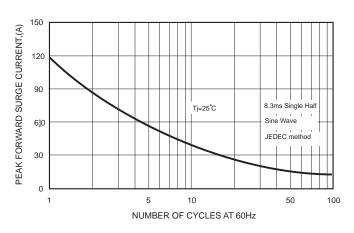
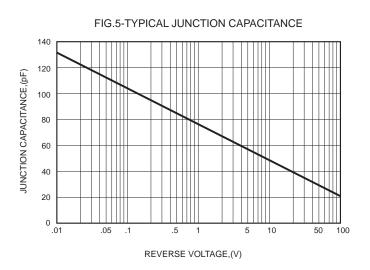


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



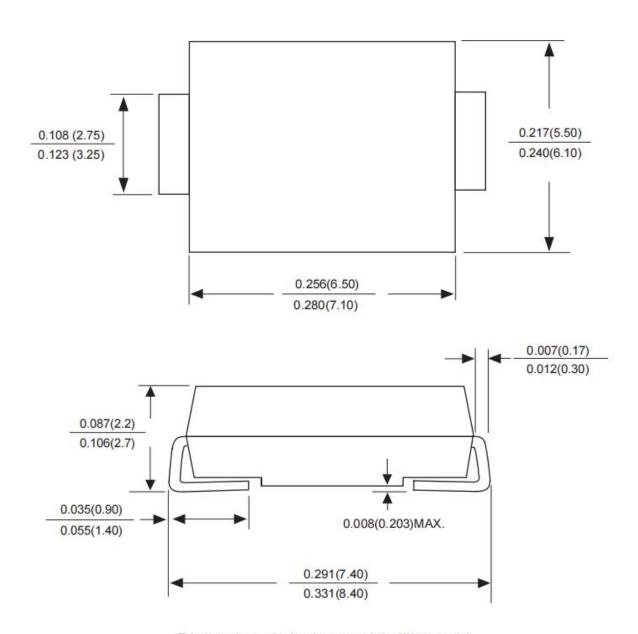


.01

20 40 60



# Package Outline Dimensions SMC



Dimensions in inches and (millimeters)



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