



Features

- Metal silicon junction, majority carrier
- conduction For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability



SMC



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
SS82-SS820	SMC	SS8xC	3000

x: From 2-20

Maximum Ratings (Ta=25°C unless otherwise noted)

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

Type Number	SS82	SS84	SS86	SS88	SS810	SS812	SS815	SS820	Units
Maximum Recurrent Peak Reverse Voltage	20	40	60	80	100	120	150	200	V
Maximum RMS Voltage	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	8.0								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150								A
Maximum Instantaneous Forward Voltage at 8.0A	0.45	0.55	0.7		0.85				V
Maximum DC Reverse Current Ta=25°C	0.1								µA
at Rated DC Blocking Voltage Ta=125°C	50								mA
Typical Junction Capacitance	600		400						pF
Typical Thermal Resistance R JA	35								°C/W
Operating Temperature Range Tj	- 55 to +150 -								°C
Storage Temperature Range Tstg	- 55 to +150 -								°C

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.27" x 0.27" (7.0 mm x 7.0 mm) copper pad areas



Typical Characteristics

Fig.1 Forward Current Derating Curve

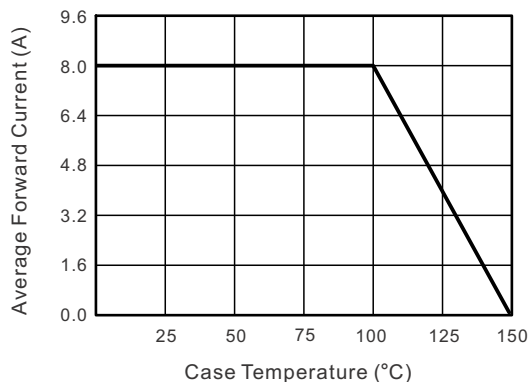


Fig.2 Typical Reverse Characteristics

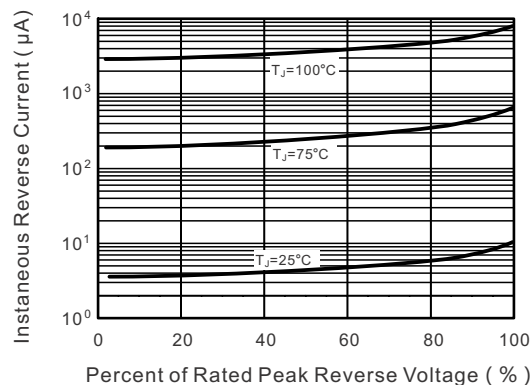


Fig.3 Typical Forward Characteristic

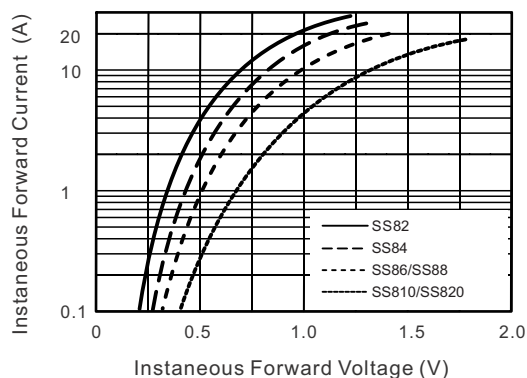


Fig.4 Typical Junction Capacitance

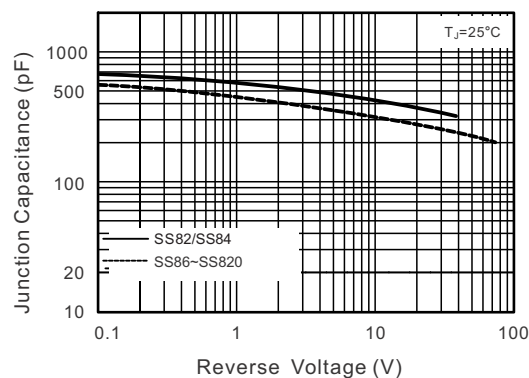


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

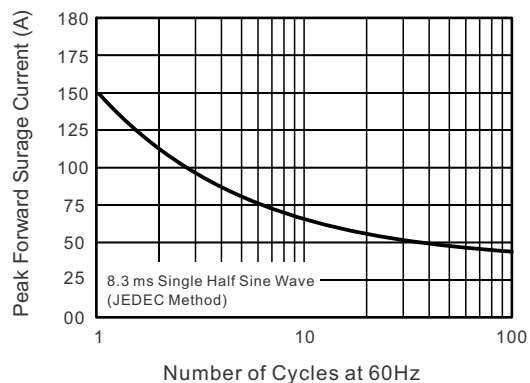
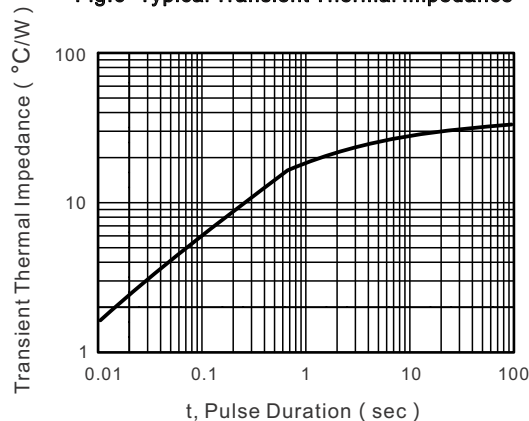


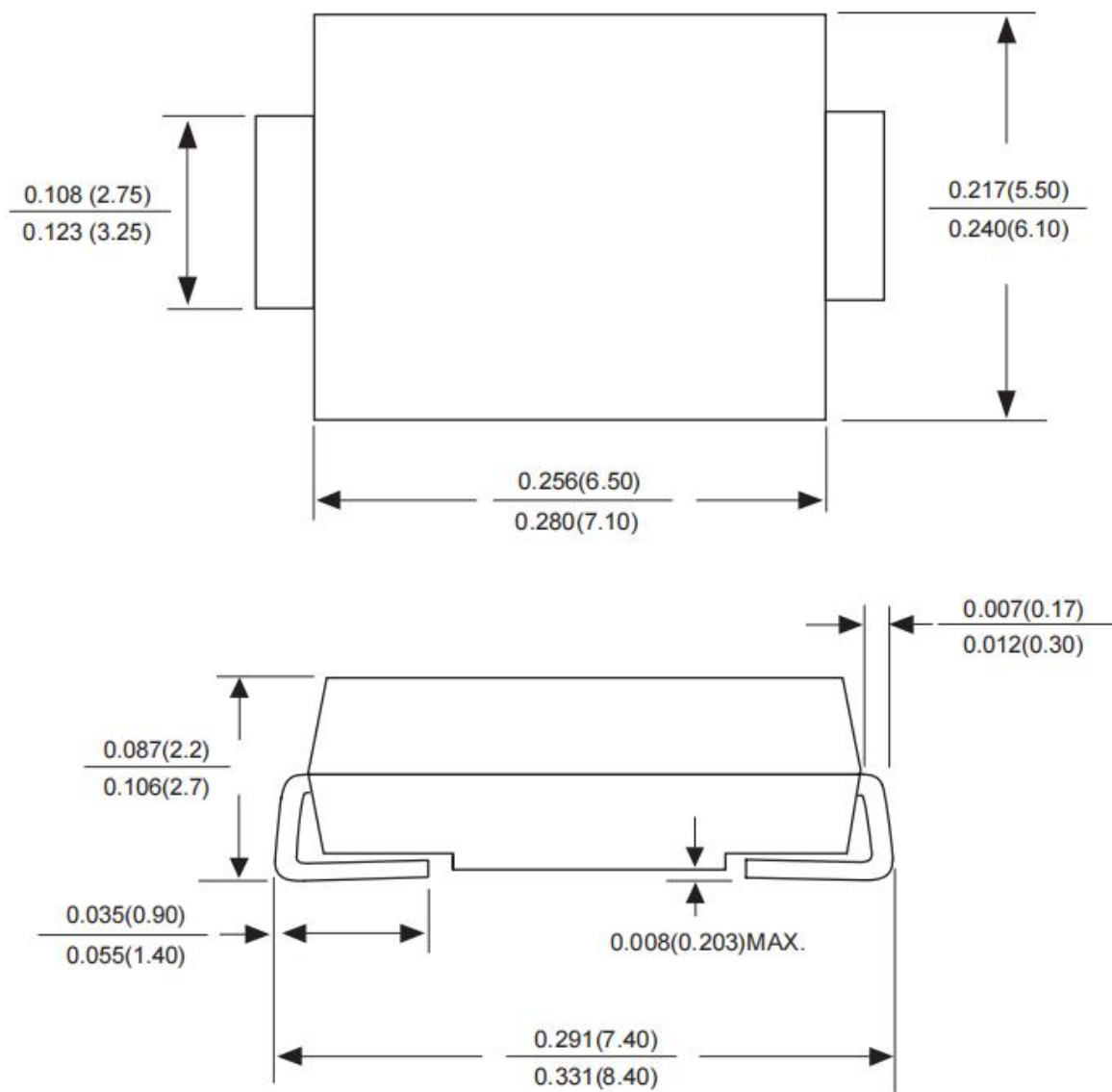
Fig.6- Typical Transient Thermal Impedance





Package Outline Dimensions

SMC



Dimensions in inches and (millimeters)



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