



## DESCRIPTION

The SM320C~SM3100C is available in SMC package.

## FEATURES

- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- Low forward voltage drop
- Available in SMC package

## ORDERING INFORMATION

Package Type	Part Number
SMC	SM320C
	SM330C
	SM340C
	SM350C
	SM360C
	SM380C
	SM390C
	SM3100C
Note	3,000pcs /Reel
AiT provides all RoHS Compliant Products	

## MECHANICAL DATA

**Case:** Molded plastic

**Epoxy:** UL 94V-0 rate flame retardant

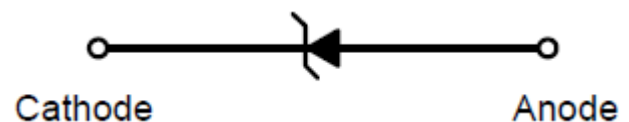
Metallurgically bonded construction

**Polarity:** Color band denotes cathode end

**Mounting position:** Any

**Weight:** 0.093 gram

## PIN DESCRIPTION





## ABSOLUTE MAXIMUM RATINGS

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

Parameter	SM 320C	SM 330C	SM 340C	SM 350C	SM 360C	SM 380C	SM 390C	SM 3100C	Unit
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	14	21	28	35	42	56	63	70	V
Maximum DC blocking Voltage	20	30	40	50	60	80	90	100	V
Maximum Average Forward Rectified Current (See Fig.1)	3.0								A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	100								A
Maximum Instantaneous Forward Voltage at 3.0A	0.55			0.75		0.85			V
Maximum DC Reverse Current T <sub>A</sub> = 25 °C at Rated DC Blocking Voltage T <sub>A</sub> = 100°C	2.0 20								mA
Typical Junction Capacitance <sup>NOTE1</sup>	300								pF
Typical Thermal Resistance R <sub>θJA</sub> <sup>NOTE 2</sup>	17								°C/W
T <sub>J</sub> , Operating Temperature Range	-50 ~ +125								°C
T <sub>STG</sub> , Storage Temperature Range	-65 ~ +150								°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

NOTE1: Measured at 1MHz and applied reverse voltage of 4.0V D.C.

NOTE2: Thermal Resistance Junction to Ambient.



## TYPICAL PERFORMANCE CHARACTERISTICS

Figure. 1 Typical Forward Current Derating Curve

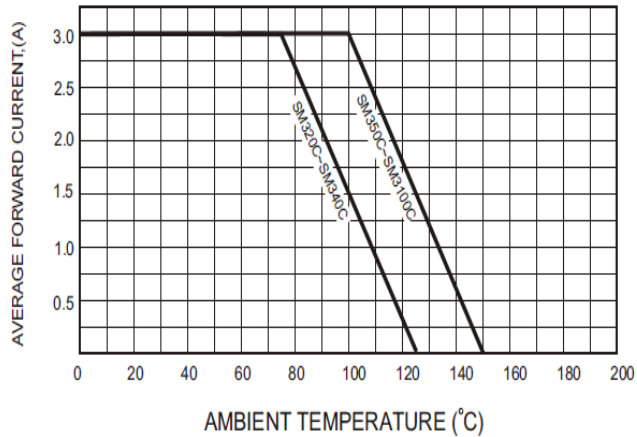


Figure. 2 Typical Forward Characteristics

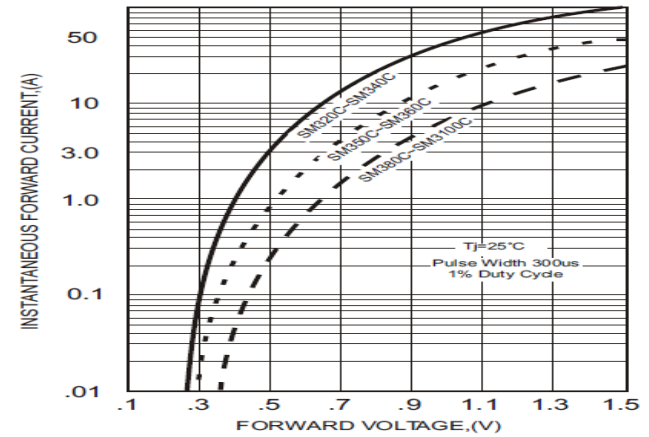


Figure. 3 Maximum Non-Repetitive Forward Surge Current

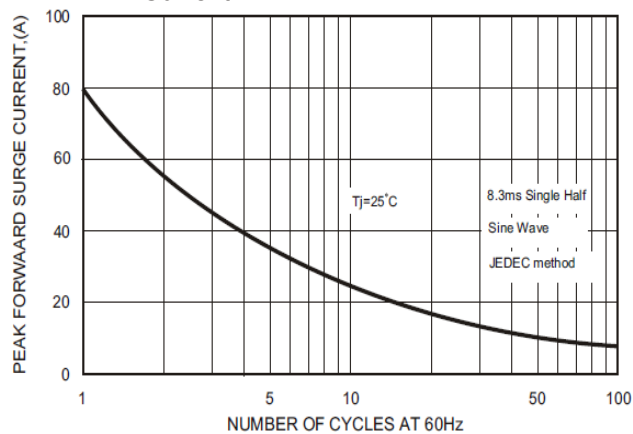


Figure. 4 Typical Junction Capacitance

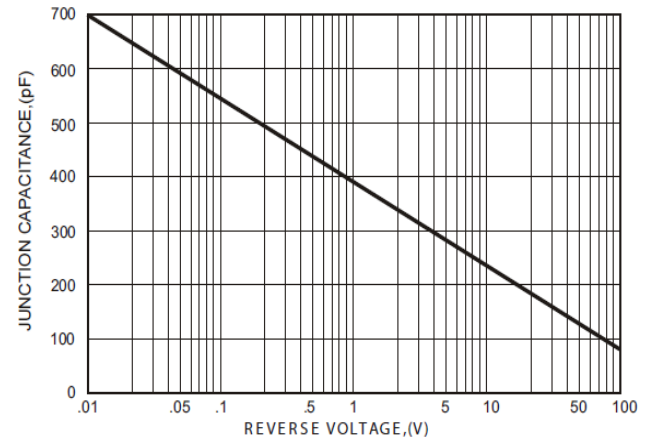
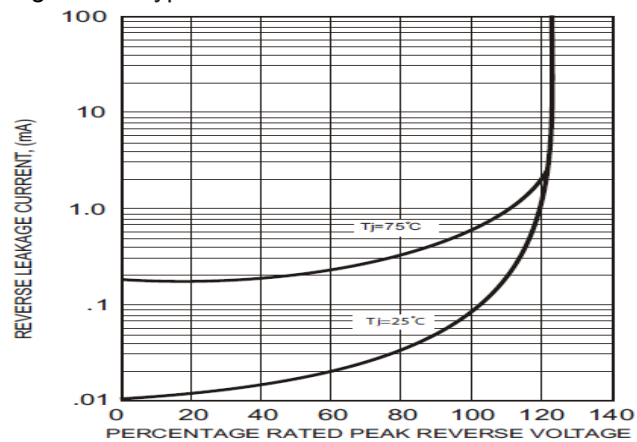


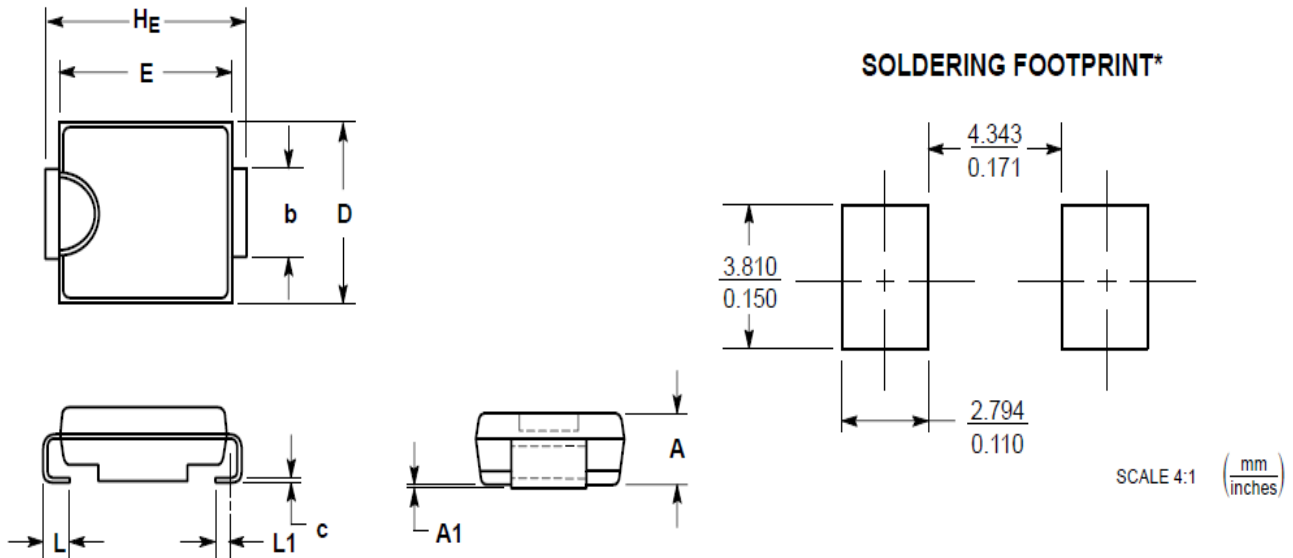
Figure. 5 Typical Reverse Characteristics





## PACKAGE INFORMATION

Dimension in SMC Package (Unit: mm)



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.075	0.095	1.90	2.41
A1	0.002	0.006	0.05	0.15
b	0.115	0.121	2.92	3.07
c	0.006	0.012	0.15	0.30
D	0.220	0.240	5.59	6.10
E	0.260	0.280	6.60	7.11
$H_E$	0.305	0.320	7.75	8.13
L	0.030	0.050	0.76	1.27
L1	0.020 REF		0.51 REF	



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