

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free



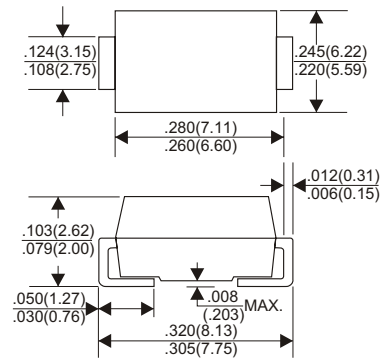
SMC

FEATURES

- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability
- * Epitaxial construction

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: As Marked
- * Mounting position: Any
- * Weight: 1.10 grams(Approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

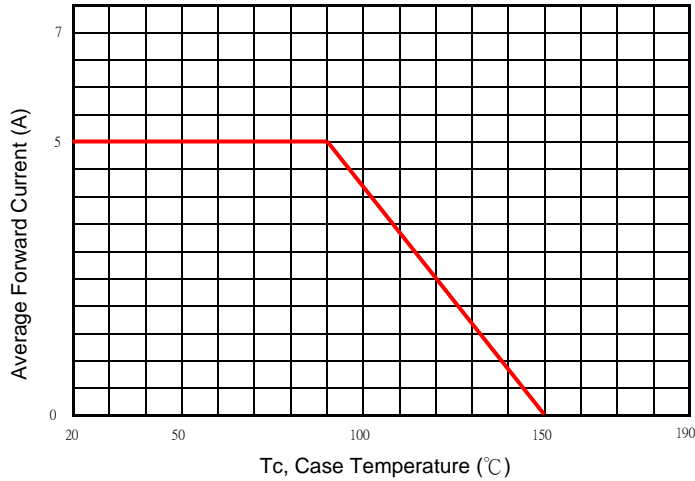
Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SM5200C	UNITS
Maximum Recurrent Peak Reverse Voltage	200	V
Working Peak Reverse Voltage	200	V
Maximum DC Blocking Voltage	200	V
Maximum Average Forward Rectified Current		
See Fig. 1	5	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150	A
Maximum Instantaneous Forward Voltage (I _F = 5 Amps, T _F = 25°C)	0.85	V
Maximum Instantaneous Forward Voltage (I _F = 5 Amps, T _F = 125°C)	0.70	V
Maximum DC Reverse Current T _a =25°C	0.02	mA
at Rated DC Blocking Voltage T _a =125°C	5	mA
Typical Junction Capacitance (Note1)	250	pF
Typical Thermal Resistance R _{θJC} (Note 2)	18	°C/W
Operating Temperature Range T _J	-50 ~ +150	°C
Storage Temperature Range T _{STG}	-65 ~ +175	°C

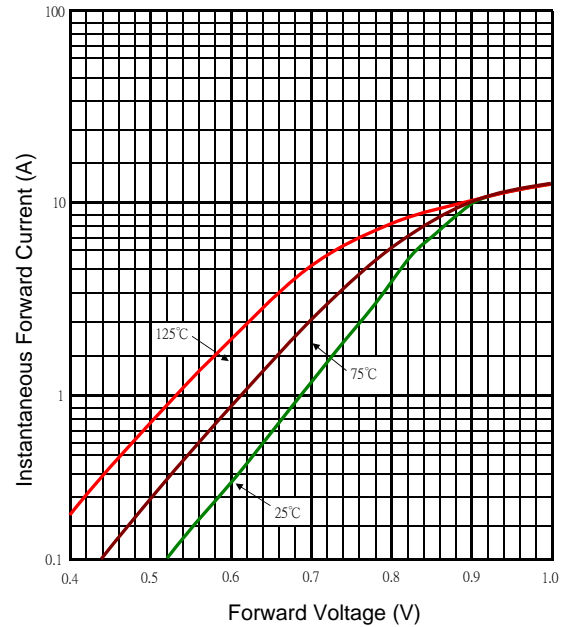
NOTES:

1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Thermal Resistance Junction to Case.

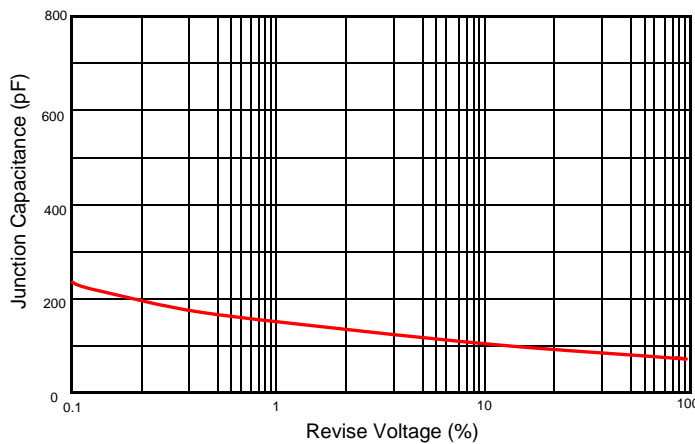
Typical Forward Current Derating Curve



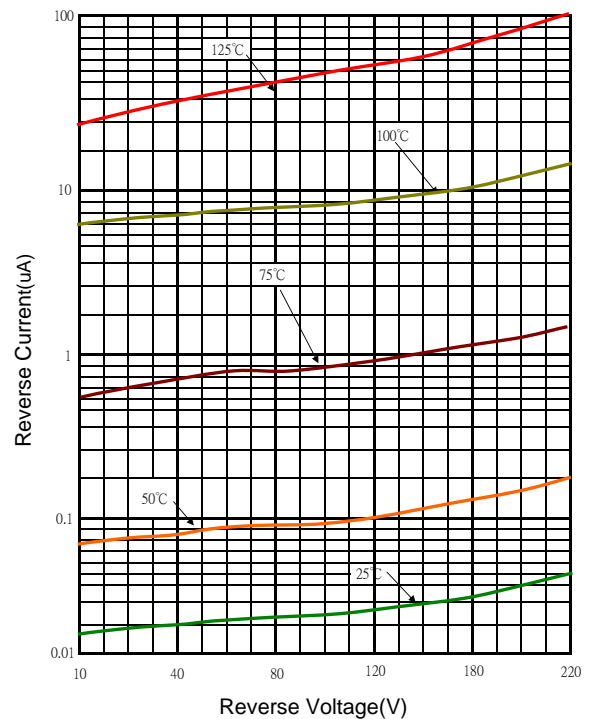
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non- Repetitive Forward Surge Current

