

**VOLTAGE RANGE: 20 - 100V**  
**CURRENT: 5.0 A**

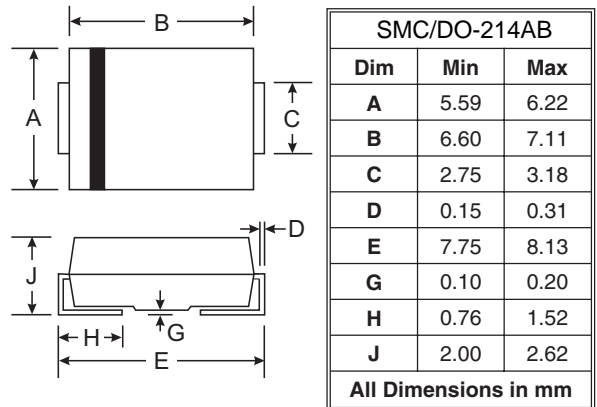
### Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-0



### Mechanical Data

- Case: SMC/DO-214AB, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.21 grams (approx.)



### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

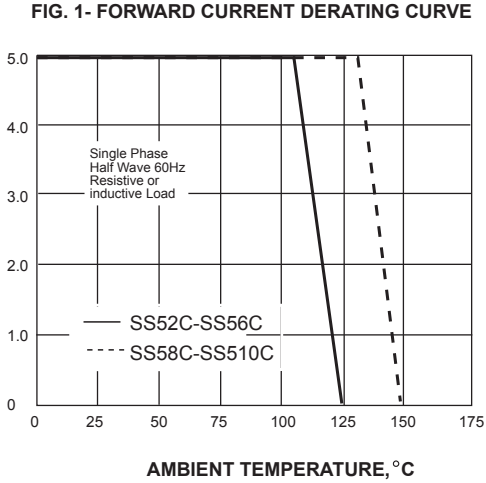
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SS52C	SS53C	SS54C	SS55C	SS56C	SS58C	SS510C	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	V
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	V
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	V
Maximum average forward rectified current at T <sub>L</sub> (see fig.1)	I <sub>(AV)</sub>	5.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	150.0							A
Maximum instantaneous forward voltage at 5.0A	V <sub>F</sub>	0.55		0.70		0.85		V	
Maximum DC reverse current at rated DC blocking voltage <small>T<sub>A</sub>=25°C</small> <small>T<sub>A</sub>=100°C</small>	I <sub>R</sub>	0.5					10		mA
Typical junction capacitance (NOTE 1)	C <sub>J</sub>	200							pF
Typical thermal resistance (NOTE 2)	R <sub>θJA</sub>	50.0							°C/W
Operating junction temperature range	T <sub>J</sub>	-65 to +125					-65 to +150		°C
Storage temperature range	T <sub>STG</sub>	-65 to +150							°C

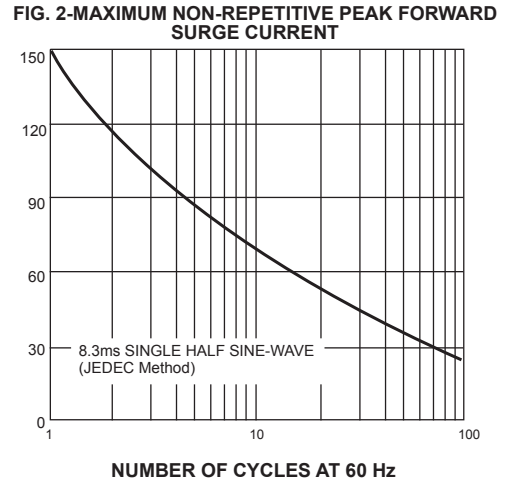
**Note:**  
 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

## RATINGS AND CHARACTERISTIC CURVES SS52C THRU SS510C

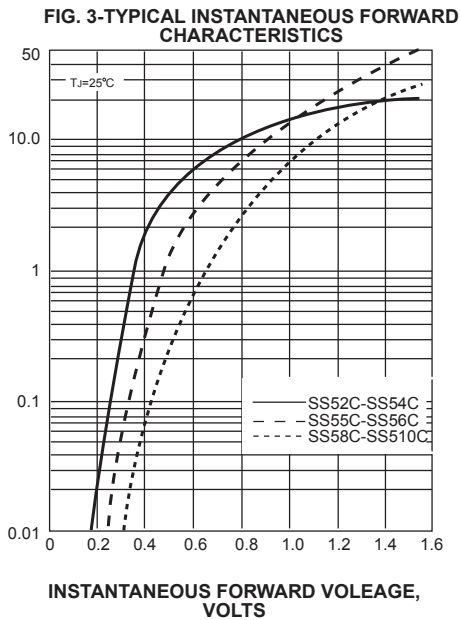
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



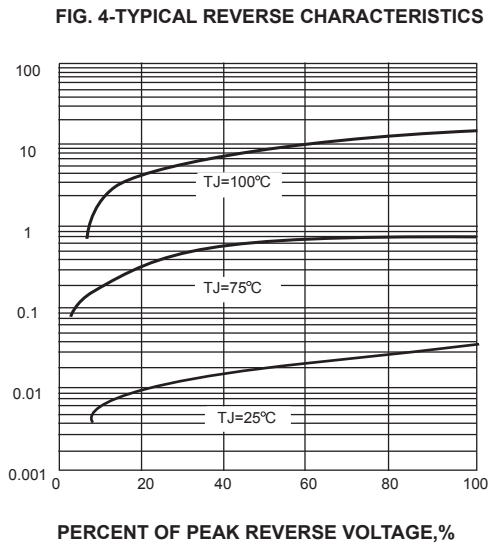
PEAK FORWARD SURGE CURRENT, AMPERES



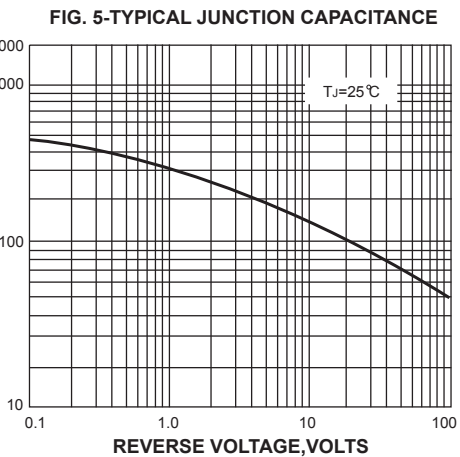
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W

