

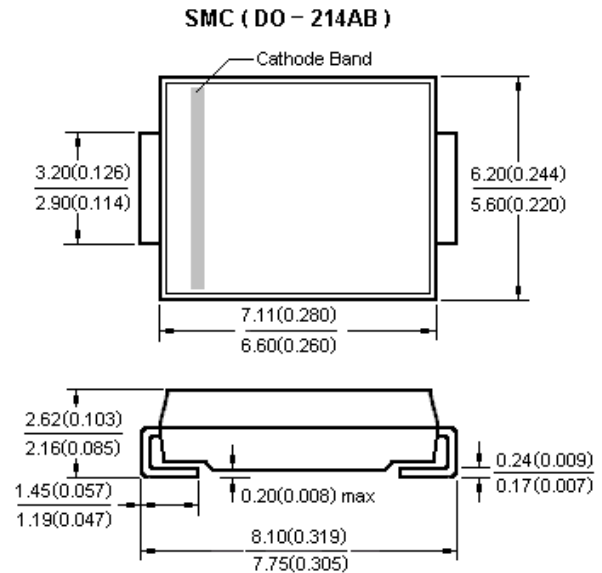


Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal silicon junction, majority carrier conduction
- High surge capability
- High current capability, low forward voltage drop
- Low power loss, high efficiency
- For use in low voltage high frequency inverters, free wheeling and polarity protection applications
- Guardring for overvoltage protection
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

Mechanical Data

- Case: JEDEC SMC, molded plastic
- Polarity: Color band denotes cathode end
- Weight: 0.007 ounces, 0.21 gram



Dimensions in millimeters and (inches)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

Items		SS52C	SS54C	SS56C	SS58C	SS510C	SS5150C	SS520C	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	20	40	60	80	100	150	200	V
Maximum RMS voltage	V_{RWS}	14	28	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	40	60	80	100	150	200	V
Maximum average forward rectified current at T_L (SEE FIG.1) (NOTE 2)	$I_{(AV)}$	5.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							A
Maximum instantaneous forward voltage at 5.0A (NOTE 1)	V_F	0.55	0.70	0.85	0.95				V
Maximum DC reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage (NOTE 1) @ $T_A=100^\circ\text{C}$	I_R	0.5					10		mA
		20							
Typical thermal resistance (NOTE 2)	R_{JA}	55							°C/W
	R_{JL}	17							
Operating junction temperature range	T_J	-55--- +150							°C
Storage temperature range	T_{STG}	-55--- +150							°C

NOTE: 1. Pulse test: 300 μs pulse width, 1% duty cycle
2. P.C.B. mounted with 0.55"X0.55"(14.0X14.0mm²) copper pad areas



SS52C~SS5200C Surface Mount Schottky Rectifiers

Characteristic Curves ($T_A=25\text{ }^\circ\text{C}$ unless otherwise noted)

FIG.1 – FORWARD DERATING CURVE

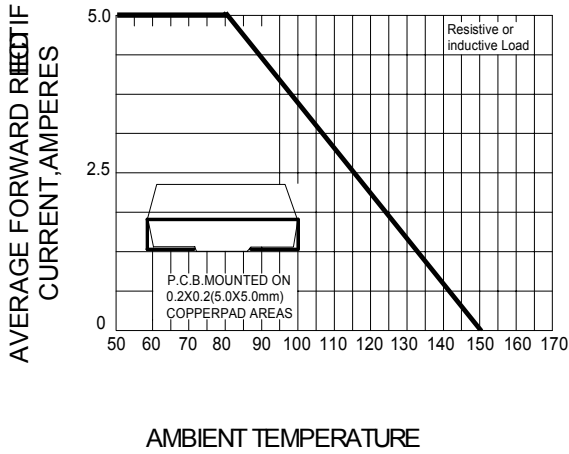


FIG.2– PEAK FORWARD SURGE CURRENT

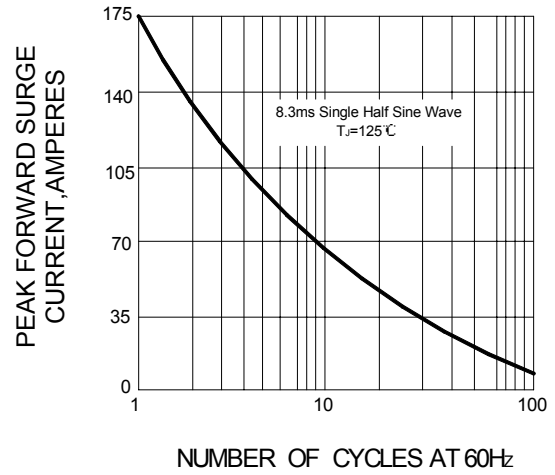


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

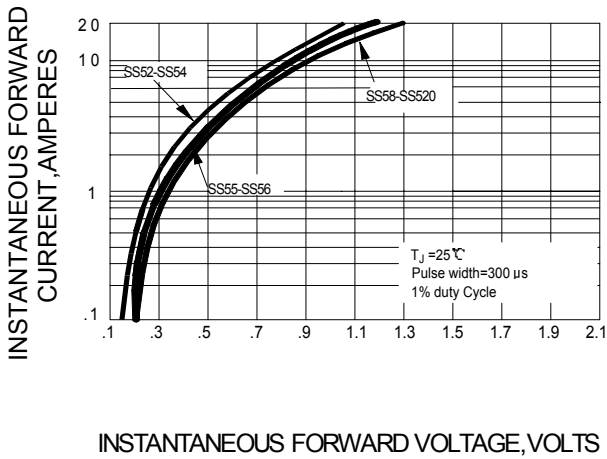


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

