

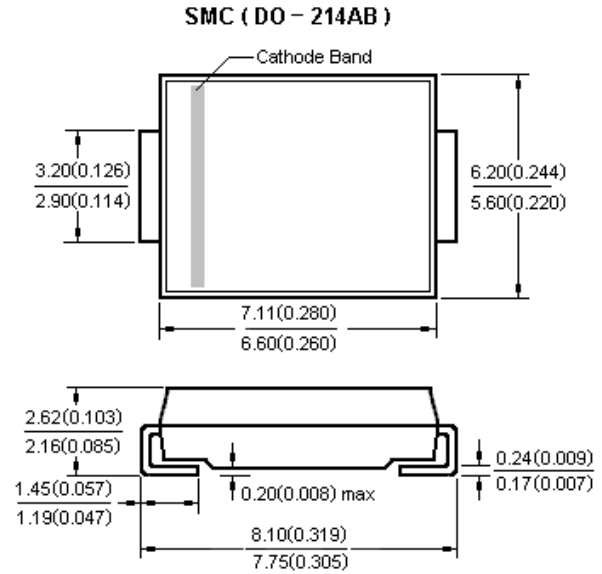


**Features**

- Plastic package has Underwriters Laborator 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		SS52	SS54	SS56	SS58	SS510	SS5150	SS5200	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 @ $T_A=25^\circ C$ at rated DC blocking voltage (NOTE 1) @ $T_A=100^\circ C$	$I_R$	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

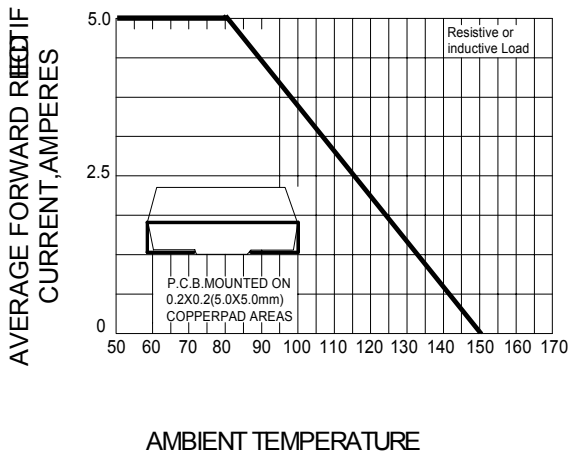
NOTE: 1. Pulse test: 300 μs pulse width, 1% duty cycle  
2. P.C.B. mounted with 0.55"X0.55"(14.0X14.0mm<sup>2</sup>) copper pad areas



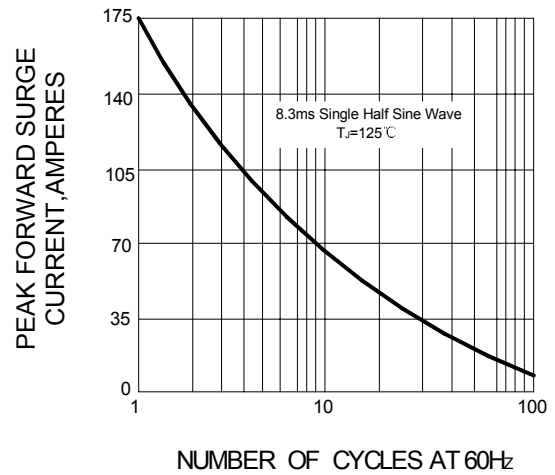
# SS52~SS5200 Surface Mount Schottky Rectifiers

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

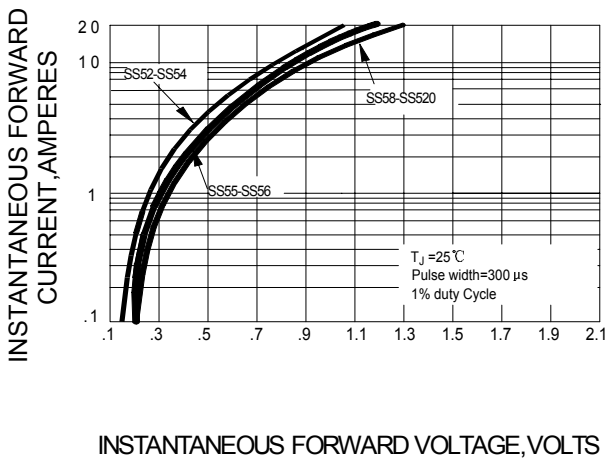
**FIG.1 – FORWARD DERATING CURVE**



**FIG.2 – PEAK FORWARD SURGE CURRENT**



**FIG.3 – TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 – TYPICAL REVERSE CHARACTERISTICS**

