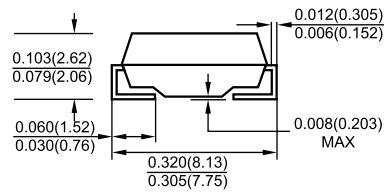
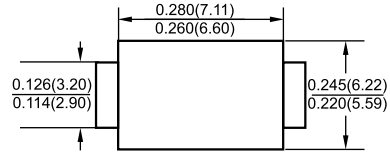




Features

- ✧ 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

SMC/DO-214AB



Dimensions in inches and (millimeters)

Mechanical Data

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

Parameter		SS62C	SS63C	SS64C	SS65C	SS66C	SS68C	SS69C	SS610C	SS615C	SS620C	UNITS
Marking code		SS62	SS63	SS64	SS65	SS66	SS68	SS69	SS610	SS615	SS620	
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	40	50	60	80	90	100	150	200	V
Maximum RMS voltage	V_{RWS}	14	21	28	35	42	56	63	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	90	100	150	200	V
Maximum average forward rectified current at T_L (SEE FIG.1) (NOTE 2)	$I_{(AV)}$	6.0										A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	175										A
Maximum instantaneous forward voltage at 6.0A (NOTE 1)	V_F	0.45	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					0.1					mA
		20					10					
Typical thermal resistance (NOTE 2)	R_{JA} R_{JL}	55					17					$^\circ\text{C/W}$
Operating junction temperature range	T_J	-55--- +150					-55--- +175					$^\circ\text{C}$
Storage temperature range	T_{STG}	-55--- +150					-55--- +175					$^\circ\text{C}$

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

Ratings AND Characteristic Curves

FIG.1 – FORWARD DERATING CURVE

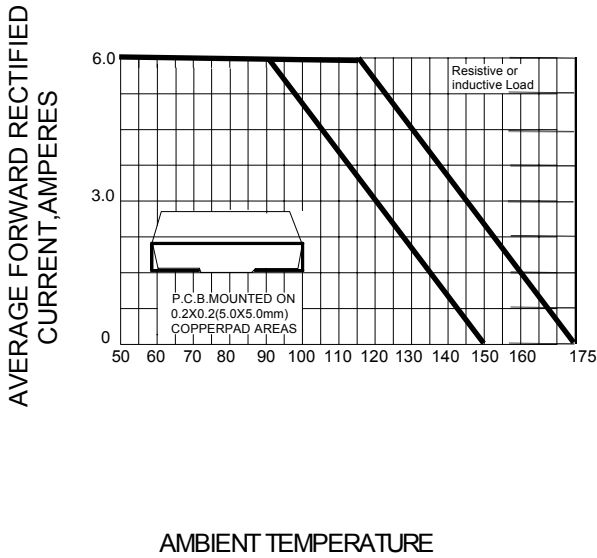


FIG.2– PEAK FORWARD SURGE CURRENT

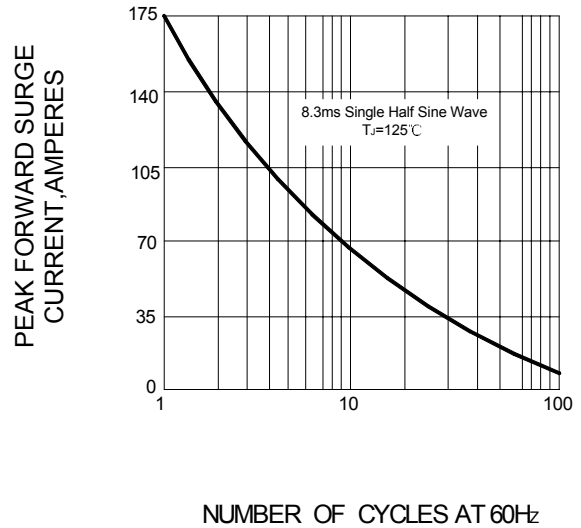


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

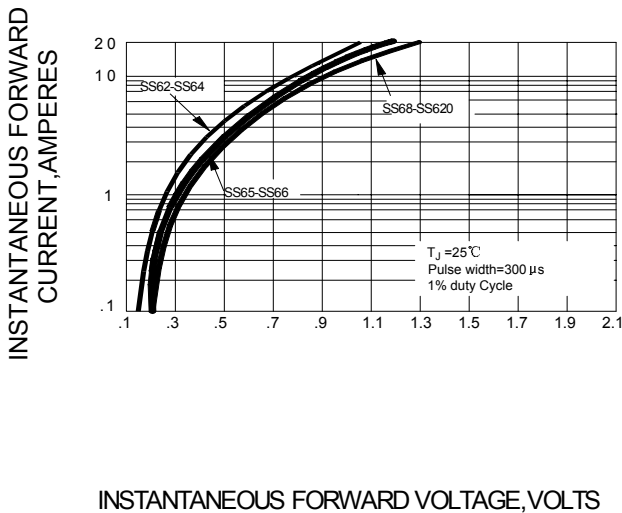
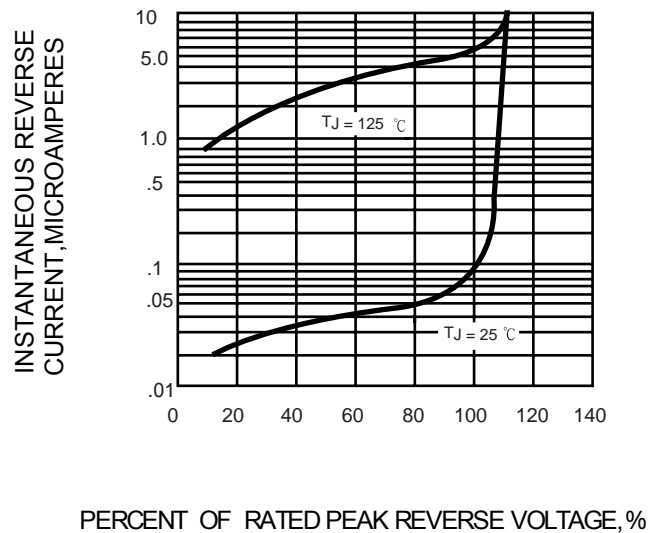


FIG.4 – TYPICAL REVERSE CHARACTERISTICS



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMC	3000/REEL	42000	36X36X36.5	18.50	15.50