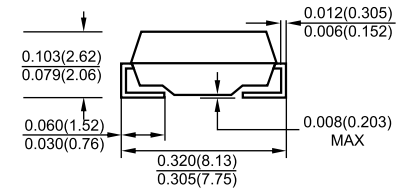
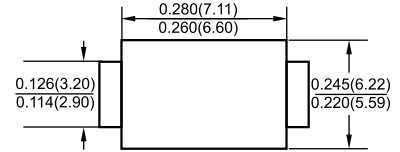




SMC/DO-214AB

Features

- ✧ Plastic package has underwriters laboratory flammability classification 94V-0
- ✧ For surface mounted applications
- ✧ Low profile package
- ✧ Built-in strain relief, ideal for automated placement
- ✧ High temperature soldering:
- ✧ 250°C/10 seconds at terminals



Mechanical Data

Dimensions in inches and (millimeters)

- ✧ Case: JEDEC DO-214AB, 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

Type Number		S5AC	S5BC	S5DC	S5GC	S5JC	S5KC	S5MC	S5TC	S5WC	S5XC	S5YC	UNITS
Marking code		S5A	S5B	S5D	S5G	S5J	S5K	S5M	S5T	S5W	S5X	S5Y	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	1300	1600	1800	2000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	760	820	880	940	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	1300	1600	1800	2000	V
Maximum Average Forward Rectified Current @TL=90°C	$I_{F(AV)}$	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	V_F	1.15										V	
Maximum reverse current at rated DC blocking voltage	@TA=25°C	10										μA	
	@TA=125°C	250											
Typical junction capacitance	C_J	35										pF	
Typical thermal resistance(note2)	$R_{\theta JA}$	40										°C/W	
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150										°C	

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts

2. Thermal resistance from junction to ambient and junction to lead P.C.B. mounted on 0.27"X0.27"(7.0X7.0mm²) copper pad areas



Ratings AND Characteristic Curves

FIG.1 – FORWARD DERATING CURVE

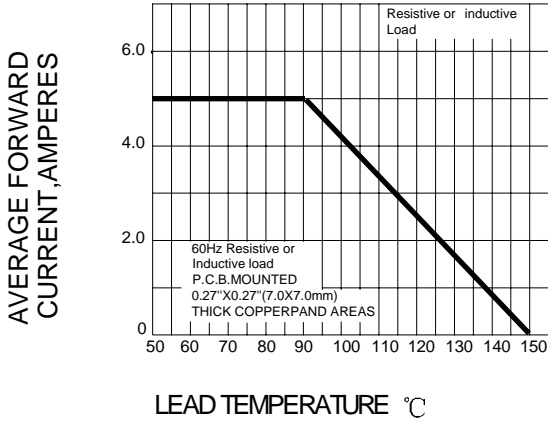


FIG.2 PEAK FORWARD SURGE CURRENT

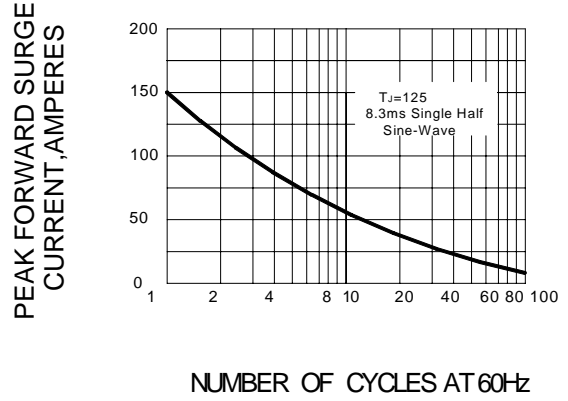


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

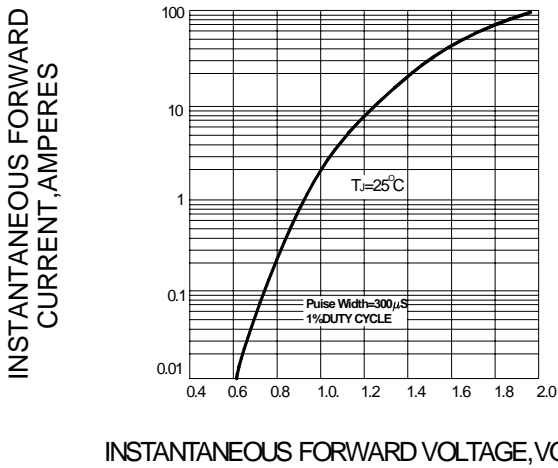


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

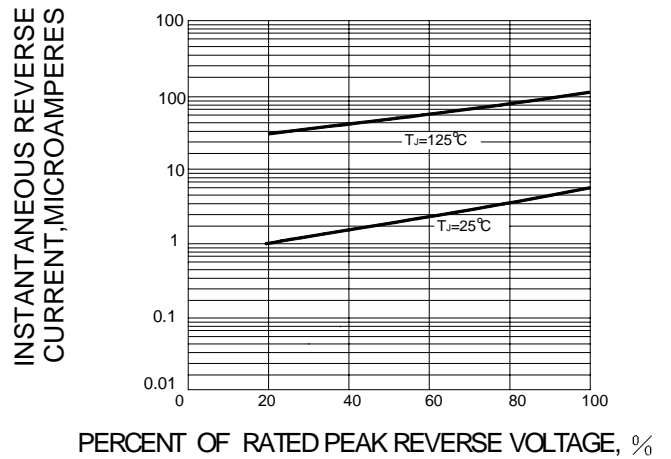
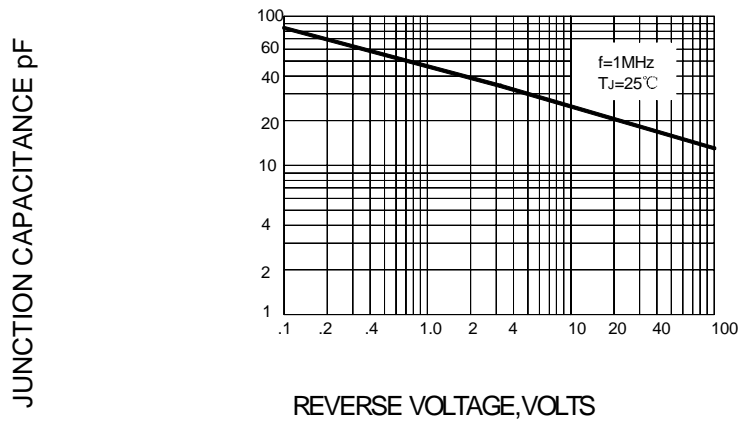


FIG.5-TYPICAL JUNCTION CAPACITANCE



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