



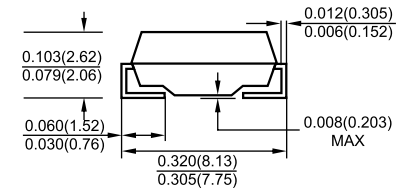
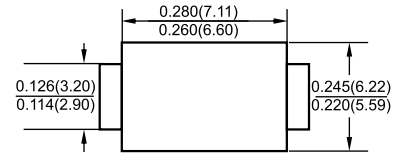
Features

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

Mechanical Data

- ✧ Case: JEDEC DO-214AB, molded plastic over passivated chip
- ✧ Polarity: color band denotes cathode end
- ✧ Weight: 0.007 ounces, 0.21 gram

SMC/DO-214AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

Parameter	Symbol	RS5AC	RS5BC	RS5DC	RS5GC	RS5JC	RS5KC	RS5MC	UNITS
Marking code		RS5A	RS5B	RS5D	RS5G	RS5J	RS5K	RS5M	
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at $T_L=90^\circ\text{C}$	$I_{F(AV)}$	5.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	150							A
Maximum instantaneous forward voltage at 5.0A	V_F	1.3							V
Maximum DC reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	I_R	5.0 200							μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	150			250		500		ns
Typical junction capacitance (NOTE 2)	C_J	32							pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	22							$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J T_{STG}$	-55-----+150							$^\circ\text{C}$

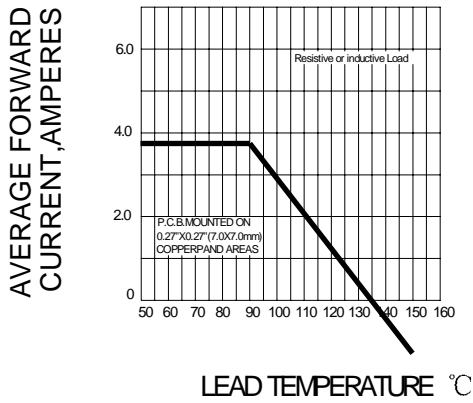
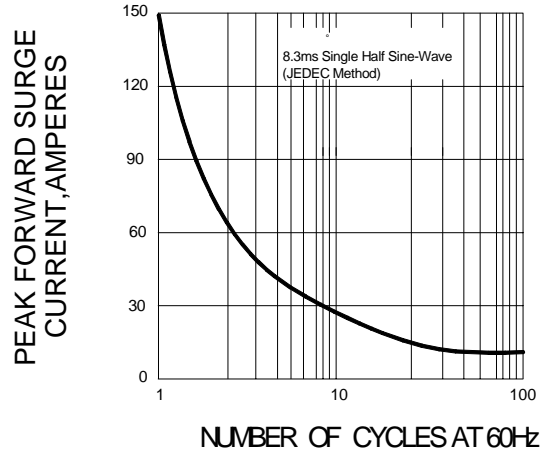
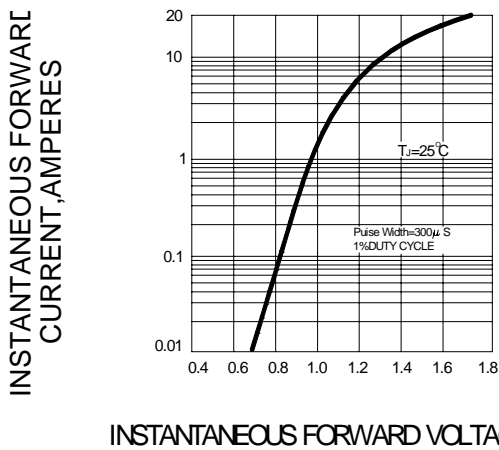
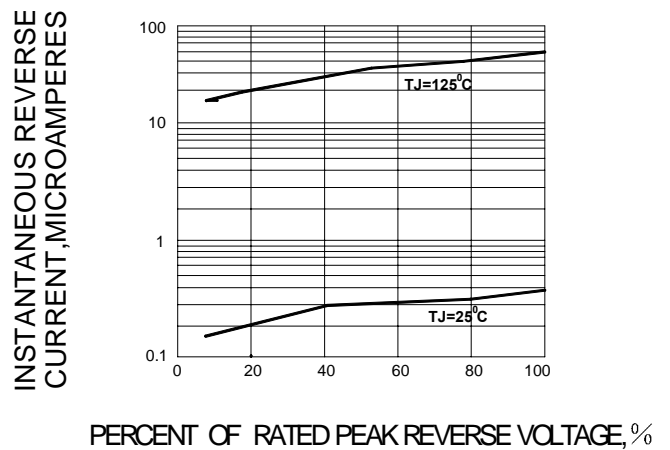
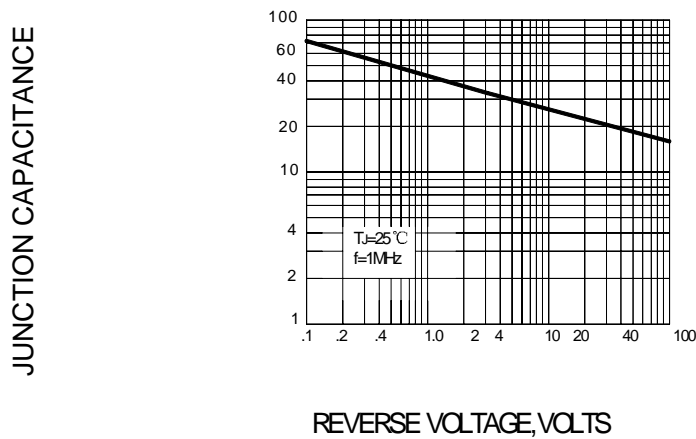
NOTE: 1.Reverse recovery time test conditions: $I_F=0.5A, I_R=1.0A, t_r=0.25A$

2. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts

3. Thermal resistance from junction to ambient and junction to lead P.C.B.mounted on 0.2"X0.2"(5.0X5.0mm²) 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