



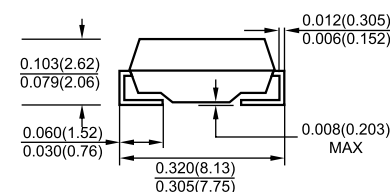
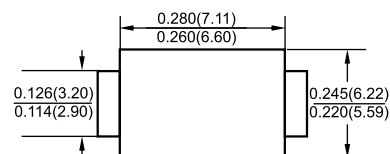
Features

- ✧ 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

		RS5A	RS5B	RS5D	RS5G	RS5J	RS5K	RS5M	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RWS}	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 blockjing voltage @ $T_A=125^{\circ}\text{C}$	I_R	5.0 200							$\mu\text{ A}$
Maximum reverse recovery time (NOTE 1)	t_{rr}	150				250	500		ns
Typical junction capacitance (NOTE 2)	C_J	32							pF
Typical thermal resitance (NOTE 3)	$R_{\theta\text{ JA}}$	22							$^{\circ}\text{C/W}$
Operating junction and storage temperature range	T_JT_{STG}	-55-----+150							$^{\circ}\text{C}$

NOTE: 1.Reverse recovery time test conditions: $I_F=0.5A$, $I_R=1.0A$, $t_{rr}=0.25A$

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

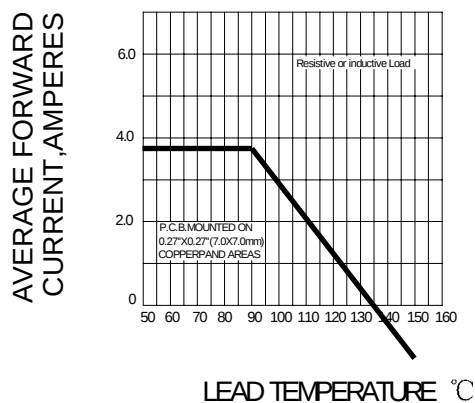


FIG.2 PEAK FORWARD SURGE CURRENT

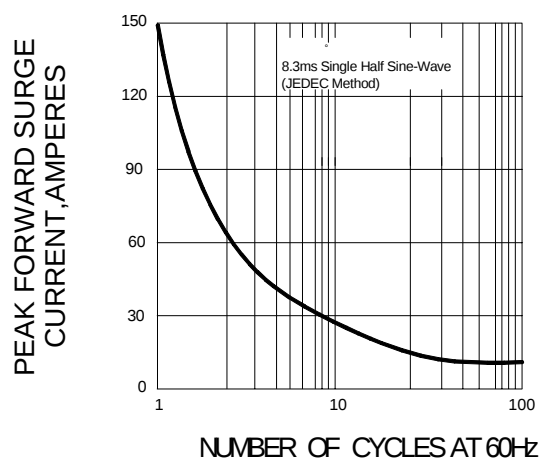


FIG.3 -- TYPICAL FORWARD CHARACTERISTICS

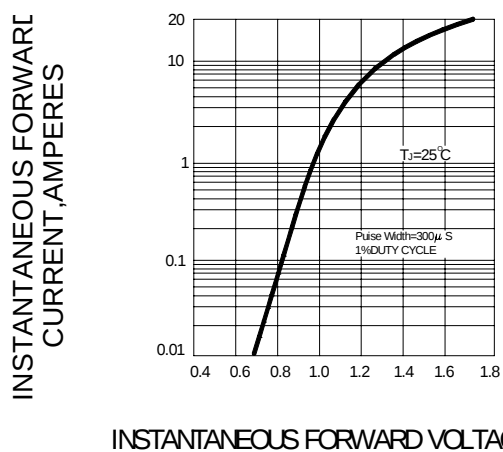


FIG.4 -- TYPICAL REVERSE CHARACTERISTICS

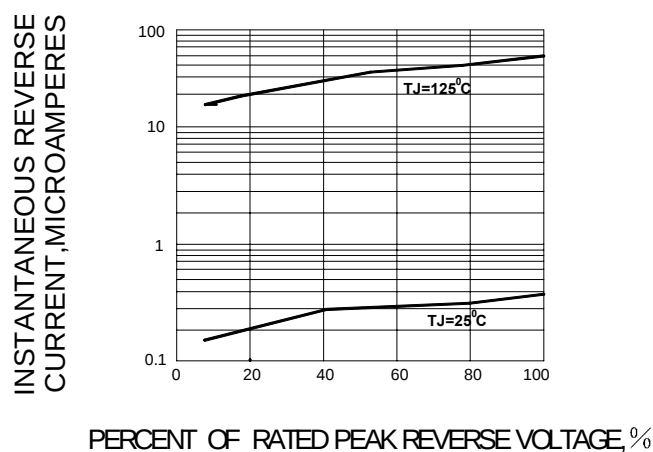
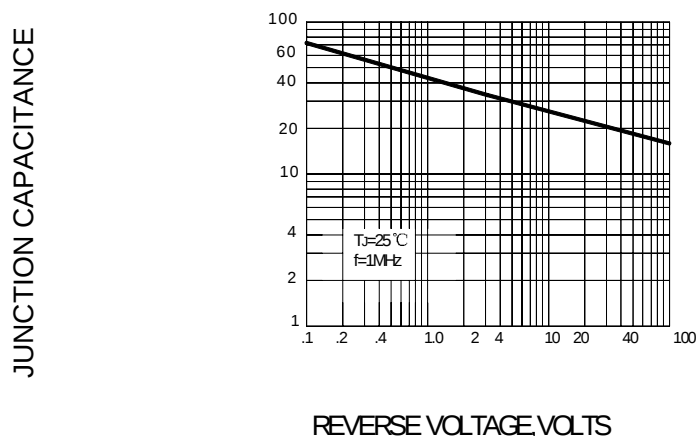


FIG.5-TYPICAL JUNCTION CAPACITANCE



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