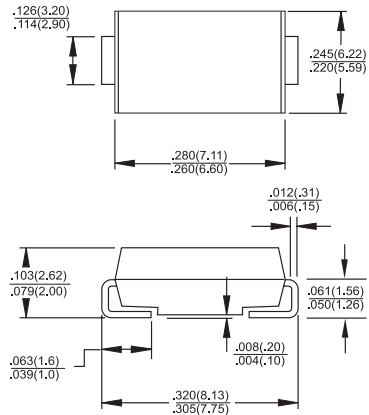




SMC/DO-214AB



Features

- ✦ For surface mounted application
- ✦ Glass passivated junction chip
- ✦ Built-in strain relief, ideal for automated placement
- ✦ Plastic material used carries Underwriters Laboratory Classification 94V-0
- ✦ Fast switching for high efficiency
- ✦ High temperature soldering: 260°C / 10 seconds at terminals
- ✦ Green compound with suffix "G" on packing code & prefix "G" on code.

Mechanical Data

- ✦ Cases: Molded plastic
- ✦ Terminals: Pure tin plated, Lead free.
- ✦ Polarity: Indicated by cathode band
- ✦ Packing: 16mm tape per EIA STD RS-481
- ✦ Weight: 0.21 gram

Dimensions in inches and (millimeters)

Marking Diagram



RS3X = Specific Device Code
 G = Green Compound
 Y = Year
 M = Work Month

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	RS 3A	RS 3B	RS 3D	RS 3G	RS 3J	RS 3K	RS 3M	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current See Fig. 1 @ T _L =75°C	I(AV)	3.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	100							A
Maximum Instantaneous Forward Voltage @ 3.0A	V _F	1.3							V
Maximum DC Reverse Current @ T _A = 25 °C at Rated DC Blocking Voltage @ T _A = 125 °C	I _R	10 250							uA uA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	150				250	500		nS
Typical Junction Capacitance (Note 2)	C _j	60							pF
Typical Thermal Resistance (Note 3)	R _{θJA} R _{θJL}	50 15							°C/W
Operating Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

- Notes:
1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
 2. Measured at 1 MHz and Applied V_R=4.0 Volts
 3. Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B. with 0.6" x 0.6" (16mm x 16 mm) Copper Pad Areas.

RATINGS AND CHARACTERISTIC CURVES (RS3A THRU RS3M)

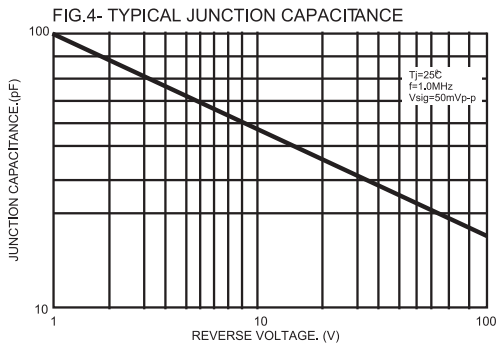
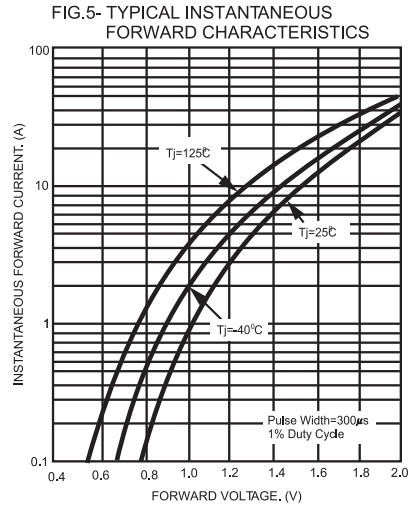
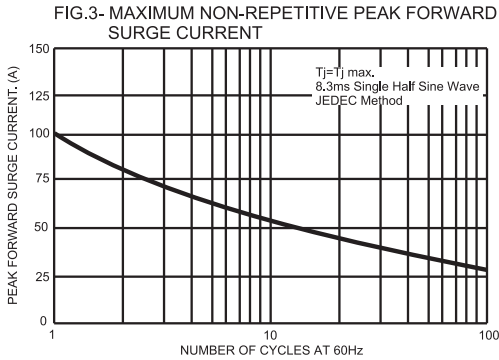
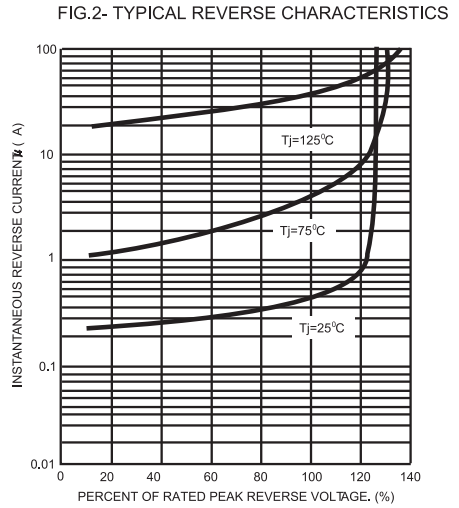
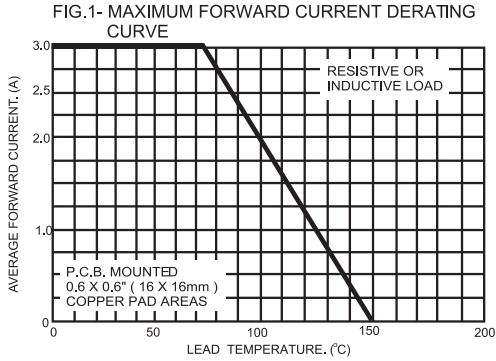


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

