

## GLASS PASSIVATED FAST RECOVERY RECTIFIER

**REVERSE VOLTAGE: 50 to 1000VOLTS**

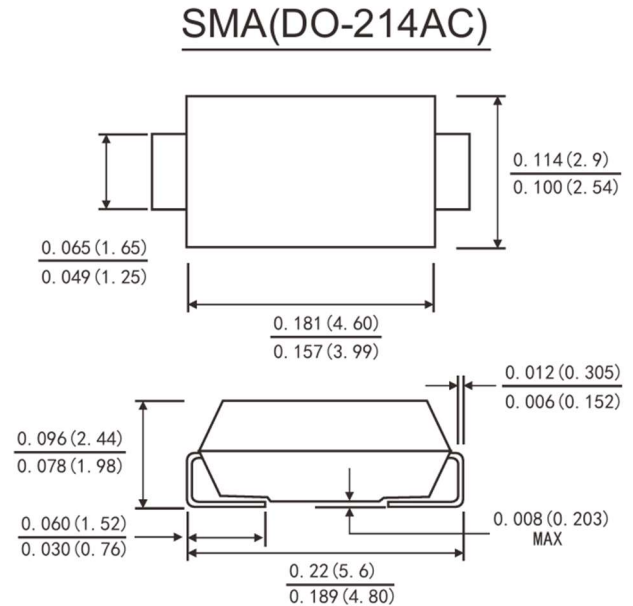
**FORWARD CURRENT: 1.0 AMPERE**

### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mount applications, Easy to pick and place
- Glass passivated junction
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU

### Mechanical Data

- Case: JEDEC SMA(DO-214AC)
- Terminals: Solder plated
- Polarity: Color band denotes cathode end
- Reel: 5000Pcs



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60HZ, resistive or inductive load.

For capacitive load, derate current by 20%.

Parameters / Marking Code	Symbols	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	$I(AV)$	1.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	30.0							Amps
Maximum Instantaneous Forward Voltage at 1.0 A	$V_F$	1.3							Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_A=25^{\circ}C$	5.0							$\mu A$
	$T_A=125^{\circ}C$								
Maximum reverse recovery time(Note1)	$t_{rr}$	150				250	500		ns
Typical junction capacitance(Note3)	$C_J$	15							pF
Typical thermal resistance (Note 2)	Junction to ambient	88							$^{\circ}C/W$
	Junction to lead								
Operating junction and storage temperature range	$T_J$ $T_{STG}$	-55 to+150							$^{\circ}C$

Note: 1. Test conditions:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$ .

2. P.C.B. mounted with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

3. Measured at 1.0MHz and reverse voltage of 4.0 volts

## RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

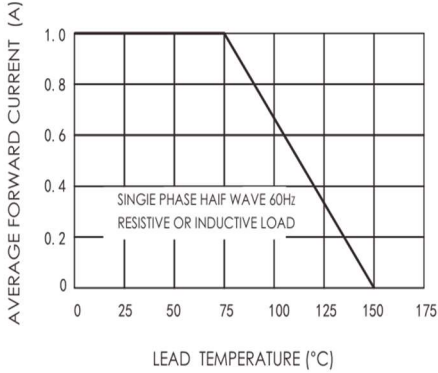


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

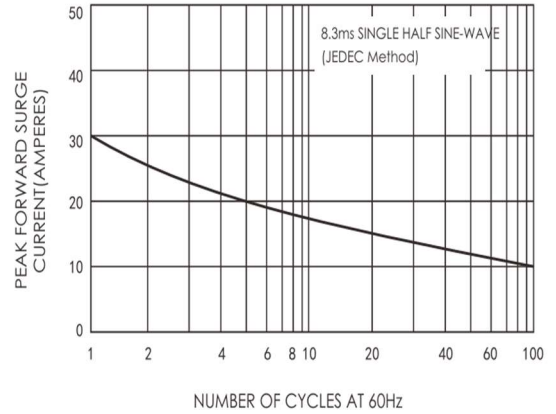


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

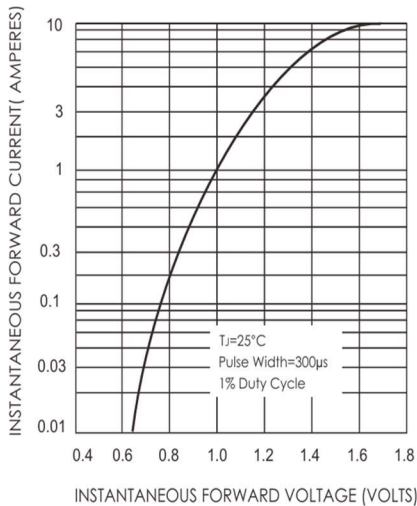


FIG.4-TYPICAL REVERSE CHARACTERISTICS

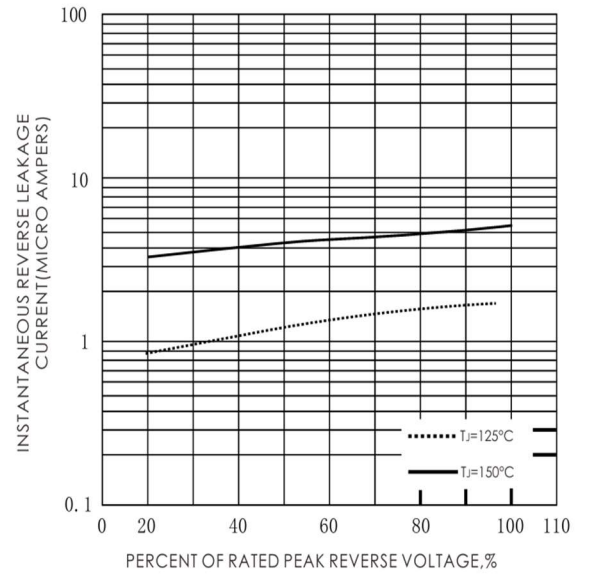


FIG.5-TYPICAL JUNCTION CAPACITANCE

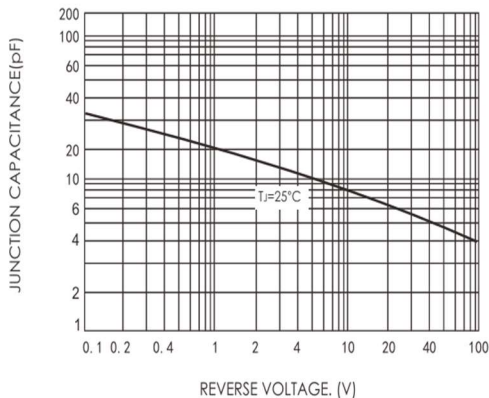


FIG.6-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

