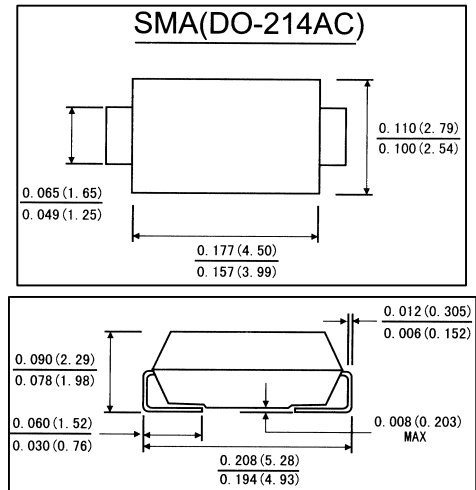


FEATURES

- . For surface mounted applications
- . Low profile package
- . Built-in strain relief , ideal for automated placement
- . Fast switching speed
- . Plastic package has Underwrites Laboratory Flammability Classification 94V-0
- . Glass passivated chip junction
- . High temperature soldering guaranteed: 250°C/10 seconds, at terminals

MECHANICAL DATA

- . **Case:** JEDEC SMA(DO-214AC) molded plastic
- . **Terminals:** Plated axial leads,solderable per MIL-STD-750,method 2026
- . **Polarity:** Color band denotes cathode end
- . **Weight:** 0.002 ounce, 0.064 gram



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%.

	Symbols	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	Units
Maximum Recurrent peak reverse voltage	V _{RRM}	50	100	200	400	600	800	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	Volts
Maximum average forward current of T _L =90°C	I _(AV)	1.0						Amp
Peak forward surge current (8.3ms single half sing wave superimposed on rated load (JEDEC method) at T _L =90°C	I _{FSM}	30.0						Amps
Maximum instantaneous forward voltage at 1.0 A	V _F	1.30						Volts
Maximum reverse recovery time(Note 1) current at rated DC Blocking Voltage	I _R	5.0						μ A
		50						
Typical Thermal Resistance(Note 3)	θ _{JL}	27.0			30.0			°C/W
	θ _{JA}	25.0			85.0			
Typical reverse recovery time(Note 2)	T _{rr}	150.0				250	500	nS
Operating and storage temperature range	T _J T _{STG}	-55 to +150						°C

- Notes:**
- 1.Test conditions:IF=0.5A,IR=1.0A,Irr=0.25A.
 - 2.Measured at 1MHz and applied reverse voltage of 4.0 Volts.
 - 3.Thermal resistance from junction to ambient and from junction to lead mounted on PCB mounted on 0.2 X 0.2"(5.0 X 5.0mm) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES RS1A THRU RS1K

FIG.1-FORWARD CURRENT DERATING CURVE

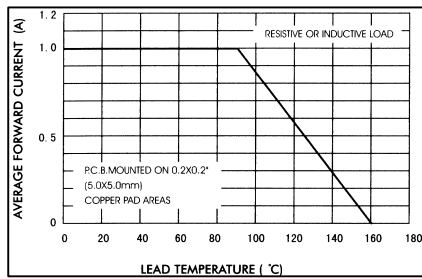


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

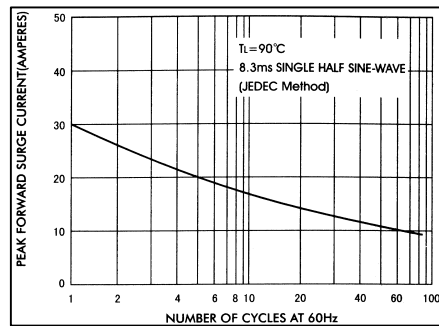


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

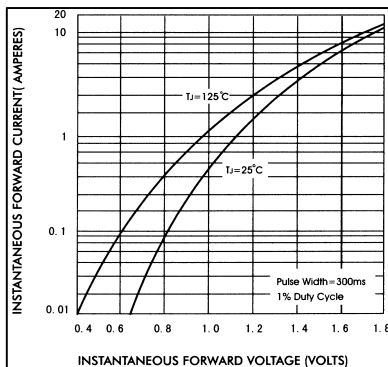


FIG.4-TYPICAL JUNCTION CAPACITANCE

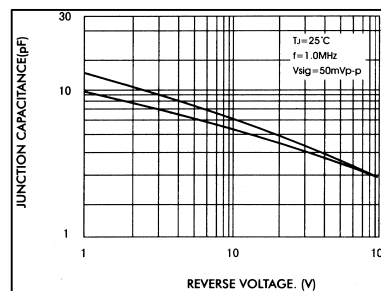


FIG.5-TYPICAL REVERSE CHARACTERISTICS

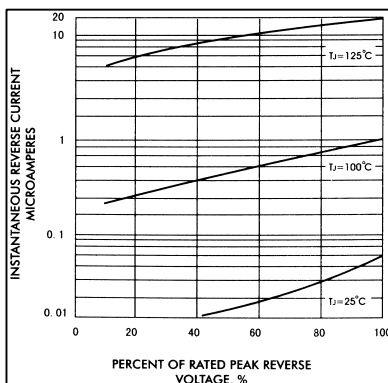


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

