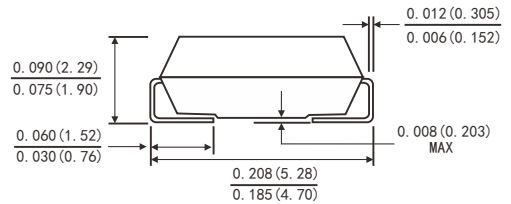
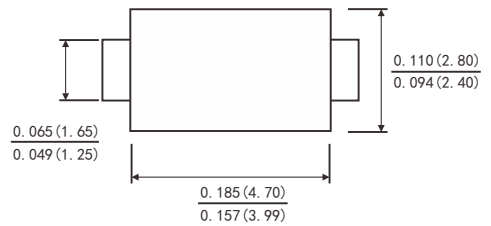


## FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passived junction
- Low forward voltage drop
- High current capability, High reliability
- Low power loss, high efficiency
- High surge current capability
- High speed switching, Low leakage
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU



## SMA(DO-214AC)



## MECHANICAL DATA

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

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Dimensions in inches and (millimeters)

(Rating 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	US1A	US1B	US1D	US1F	US1G	US1J	US1K	US1M	Units	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	600	800	1000	Volts	
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	210	280	420	560	700	Volts	
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	300	400	600	800	1000	Volts	
Maximum Average Forward Rectified Current	I(AV)	1.0								Amp	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30.0								Amps	
Maximum Instantaneous Forward Voltage at 1.0 A	V <sub>F</sub>	1.0			1.30		1.7			Volts	
Maximum DC Reverse Current at rated DC blocking voltage	T <sub>A</sub> =25°C	5.0								μA	
	T <sub>A</sub> =125°C	50									
Typical Thermal resistance	R <sub>θJA</sub>	75								°C/W	
	R <sub>θJL</sub>	27									
Maximum reverse recovery time(Note1)	T <sub>rr</sub>	50					75				ns
Typical junction capacitance(Note2)	C <sub>J</sub>	15					10				pF
Operating junction and storage temperature range	T <sub>J</sub> T <sub>STG</sub>	-55 to+150								°C	

Note: 1.Test conditions: I<sub>F</sub>=0.5A,I<sub>R</sub>=1.0A,I<sub>RR</sub>=0.25A.

2.Measured at 1MHz and applied reverse voltage of 4.0 Volts.

# RATINGS AND CHARACTERISTIC CURVES US1A THRU US1M

FIG.1-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

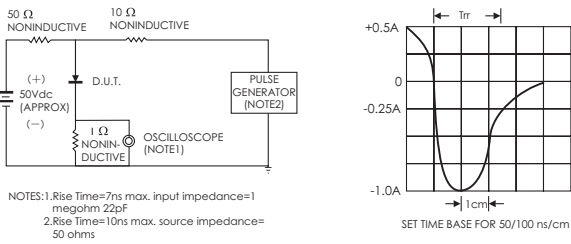


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

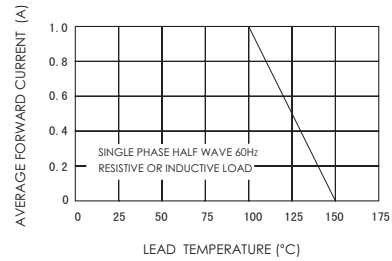


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

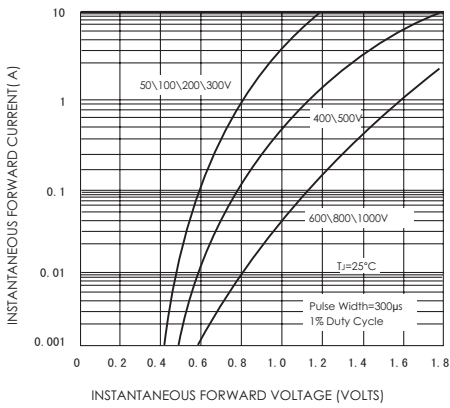


FIG.4-TYPICAL REVERSE CHARACTERISTICS

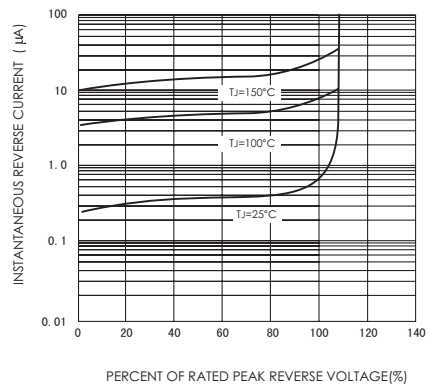


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

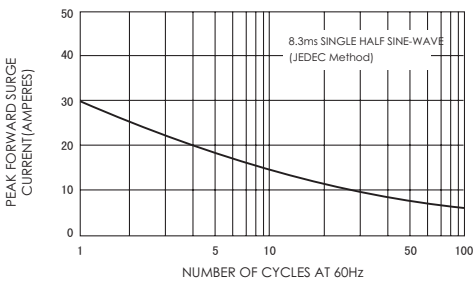


FIG.6-TYPICAL JUNCTION CAPACITANCE

