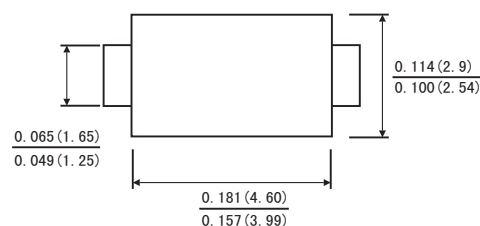


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- For surface mounted applications
- Built-in strain relief, ideal for automated placement
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

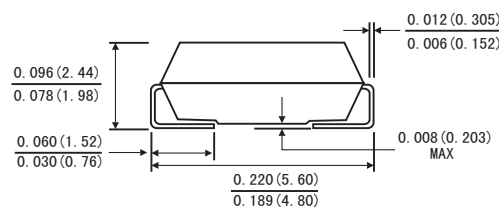


SMA(DO-214AC)



MECHANICAL DATA

- Case: JEDEC DO-214AC molded plastic over glass passivated chip
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Polarity: Color band denotes cathode end
- Weight: 0.002 oz., 0.064 g



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 by 20%.)

	Symbols	S1A	S1B	S1D	S1G	S1J	S1K	S1M	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							Amp
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30.0							Amps
Maximum Instantaneous Forward Voltage at 1.0 A	V_F	1.1							Volts
Maximum Reverse current at rated DC Blocking Voltage	$T_A=25^{\circ}C$	I_R	5.0						μA
	$T_A=125^{\circ}C$		250.0						
Typical Thermal resistance (Note 2)	$R_{\theta JA}$	75							$^{\circ}C/W$
	$R_{\theta JL}$	27							
Typical Junction Capacitance(Note 1)	C_J	12							pF
Maximum reverse recovery time(Note3)	t_{rr}	2000							ns
Operating and Storage temperature Range	T_J, T_{STG}	-55 to+150							$^{\circ}C$

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V DC.

2.Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm)lead length, P.C.B. Mounted

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

RATINGS AND CHARACTERISTIC CURVES S1A THRU S1M

FIG.1-FORWARD CURRENT DERATING CURVE

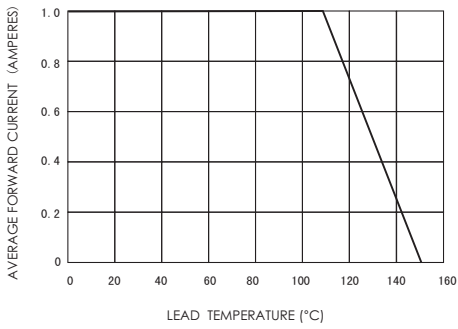


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

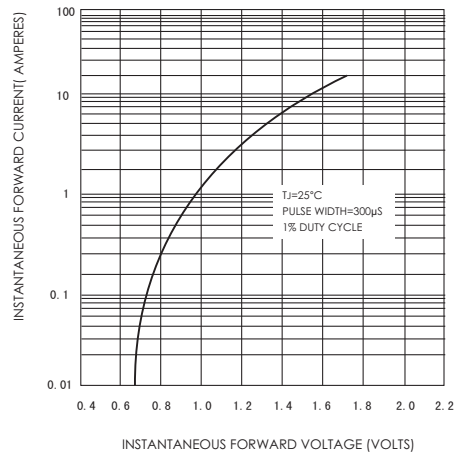


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

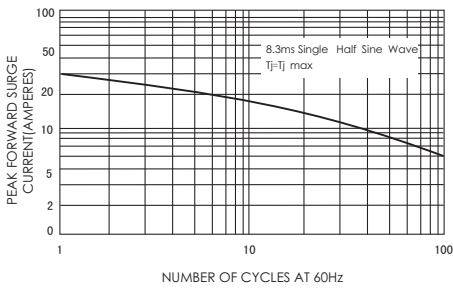


FIG.4-TYPICAL REVERSE CHARACTERISTICS

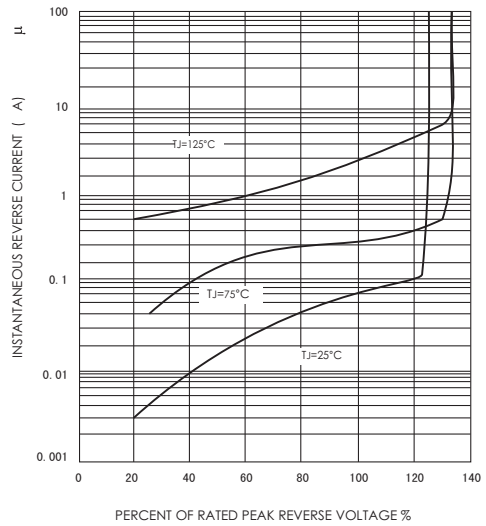


FIG.5-TYPICAL JUNCTION CAPACITANCE

