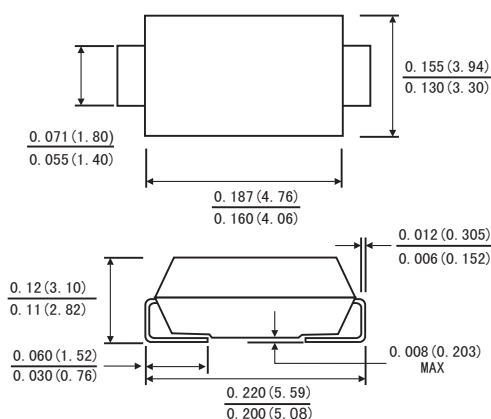


FEATURES

- 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



SMB(DO-214AA)



MECHANICAL DATA

- Case: JEDEC DO-214AA molded plastic over glass passivated chip
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end

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	S2A	S2B	S2D	S2G	S2J	S2K	S2M	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	$I_{(AV)}$	2.0							Amp
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	70							Amps
Maximum Instantaneous Forward Voltage at 2.0 A	V_F	1.0							Volts
Maximum Reverse current at rated DC Blocking Voltage	$T_A=25^{\circ}C$	I_R							μA
	$T_A=100^{\circ}C$								
Typical Thermal resistance (Note 2)	$R_{\theta JA}$	40							$^{\circ}C/W$
Typical Junction Capacitance	C_j	20							PF
Maximum Reverse Recovery Time (Note 1)	T_{rr}	2.5							μs
Operating and Storage temperature Range	T_J	-55 to+150							$^{\circ}C$
	T_{STG}	-55 to+150							

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

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

RATINGS AND CHARACTERISTIC CURVES S2A THRU S2M

FIG.1-FORWARD CURRENT DERATING CURVE

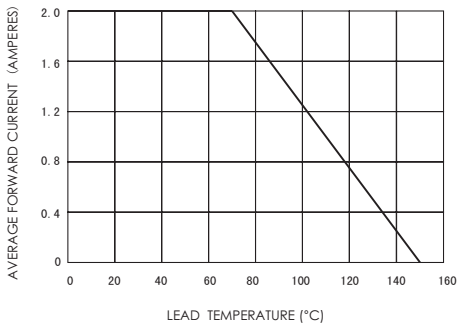


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

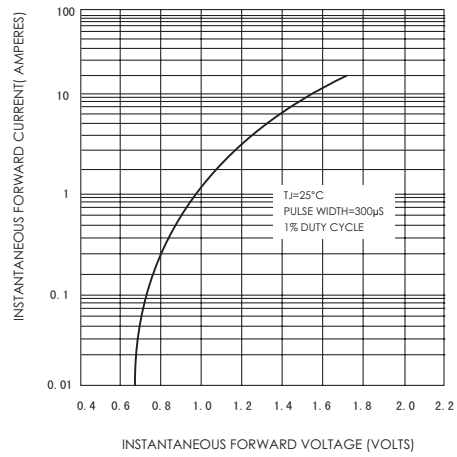


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

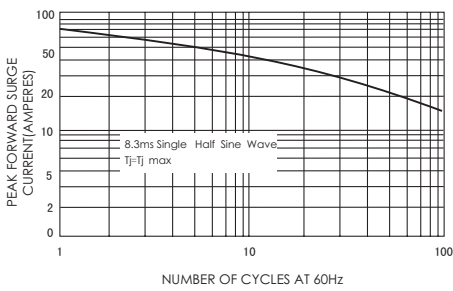


FIG.4-TYPICAL REVERSE CHARACTERISTICS

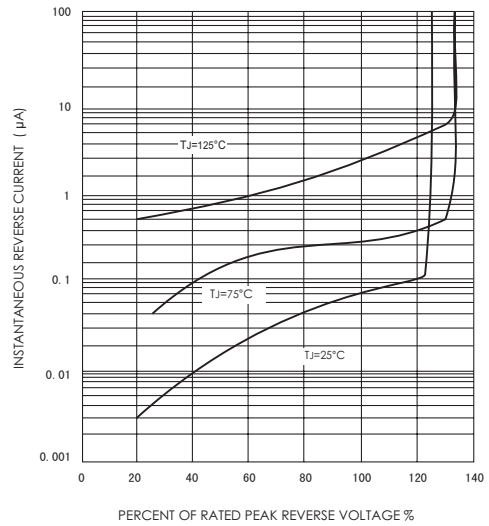


FIG.5-TYPICAL JUNCTION CAPACITANCE

