

FEATURES

- *Ideal for surface mounted applications
- *Low leakage current
- *Glass passivated

MECHANICAL DATA

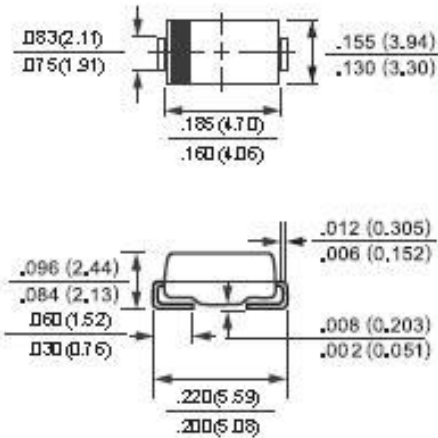
- *Case: Molded plastic
- *Epoxy: UL 94V -0 rate flame retardant
- *Terminals: Solder plated, solderable per
MiL-STD-750, Method 2026
- *Polarity: As marked
- *Mounting position: Any
- *Weight: 0.093 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%



SMB(DO-214AA)



Dimensions in inches and (millimeters)

	SYMBOL	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 at $T_A = 75^\circ C$	I_o	2.0							Amps
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	60							Amps
Maximum Instantaneous Forward Voltage at 2.0ADC	V_F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_A = 25^\circ C$	5.0							uAmps
	@ $T_A = 100^\circ C$	100							
Maximum Reverse Recovery Time (Note 3)	t_{rr}	2.5							uSec
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	20							$^\circ C/W$
Typical Junction Capacitance (Note 1)	C_J	30							pF
Operating and Storage Temperature Range	$T_{J,STG}$	-65 to +175							$^\circ C$

NOTES: 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts

2. Thermal Resistance (Junction to Ambient), 0.2X0.2in², (5X5mm²) copper pads to each terminal.

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

RATING AND CHARACTERISTIC CURVES (S2A THRU S2M)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

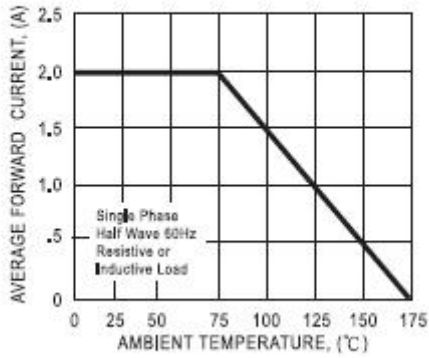


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

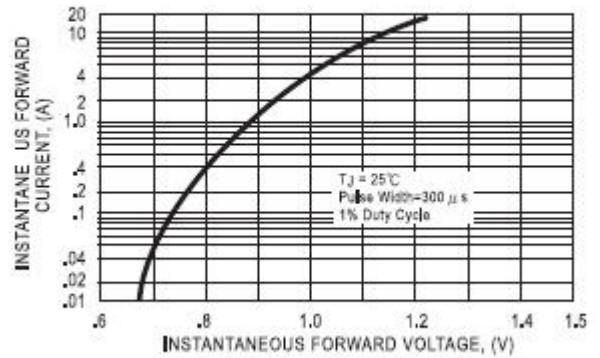


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

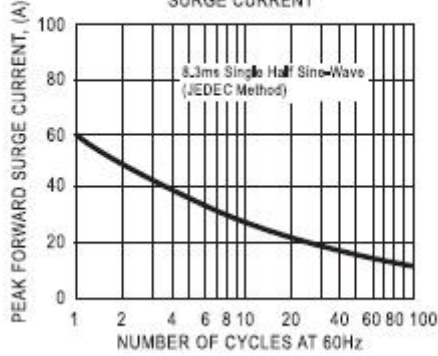


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

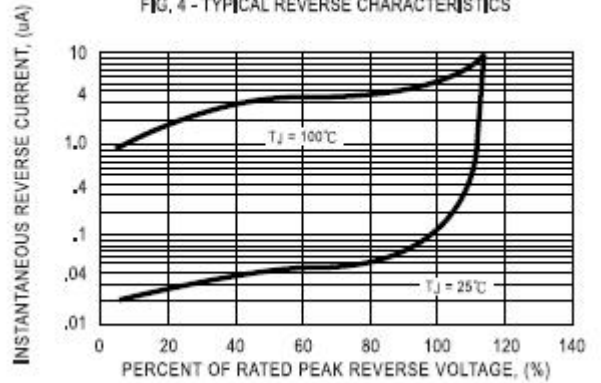


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

