

**SURFACE MOUNT ULTRA FAST RECTIFIER
US1AB THRU US1MB**

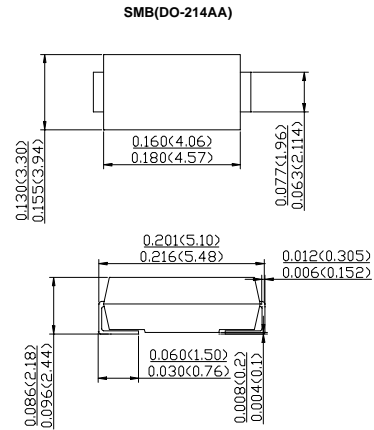
VOLTAGE RANGE 50 to 1000 Volts
Forward Current 1.0 Amperes

FEATURES

- Fast surface mounted applications
- Glass passivated junction.
- Ultra –Fast recovery time for high efficiency.
- Plastic package has underwrites laboratory flammability classification 94v-0
- High temperature soldering guaranteed:
250 °C/10 seconds at terminals tension.

MECHANICAL DATA

- Case: molded plastic
- Polarity: band indicate cathode .
- Mounting Position: Any.
- Weight: 0.064 grams



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	US1AB	US1BB	US1DB	US1GB	US1JB	US1KB	US1MB	UNITS
Maximum Repetitive 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 $T_A=50^\circ C$	$I_{(AV)}$	1.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							Amps
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.0				1.3	1.7		Volts
Maximum DC Reverse Current at rated DC blocking voltage at	$T_A=25^\circ C$	10							μA
	$T_A=125^\circ C$	50							
Maximum Reverse Recovery Time (Note 1)	T_{RR}	50				75			nS
Typical Junction Capacitance (Note 2)	C_J	15							PF
Maximum Thermal Resistance (Note 3)	R_{QJL}	75							$^\circ C/W$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175							$^\circ C$

NOTES:

- 1.Reverse recovery test condition, $I_F=0.5A$ $I_R=1.0A$ $I_{RR}=0.25A$.
- 2.Measured at 1MHZ and applied reverse voltage of 4.0 volts.
- 3.Thermal resistance junction to terminal 6.0mm² copper pads to each terminal.



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Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

