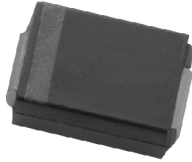


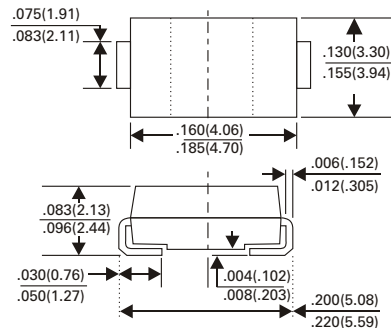
US2AB thru US2MB

SURFACE MOUNT REVERSE VOLTAGE 50 TO 1000 VOLTS

ULTRA FAST RECTIFIERS FORWARD CURRENT - 2.0 AMPERES



SMB/DO-214AA



Dimensions in inches and (millimeters)

FEATURES

- Glass passivated chip
- Ultra fast switching for high efficiency
- For surface mount applications
- Low forward voltage drop and high current capability
- Low reverse leakage current
- Plastic material UL flammability classification 94V-0
- High temperature soldering : 260°C/10seconds at terminals
- Pb free product are available : 99% Sn above can meet RoHS Environment substance directive request

MECHANICAL DATA

Case : JEDEC DO-214AA molded plastic
Case : Molded plastic
Polarity : Indicated by cathode band
Weight : 0.003 ounce, 0.093grams

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%

	SYMBOL	US2AB	US2BB	US2DB	US2GB	US2JB	US2KB	US2MB	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 @ T _L =75°C	I _(AV)	2.0							Amps
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	50							Amps
Maximum Forward Voltage at 2.0A DC	V _F	1.0			1.3	1.5	1.7		Volts
Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =100°C	I _R	10 100							μ A
Maximum Reverse Recovery Time (NOTE 1)	T _{RR}	50					75		nS
Typical Junction Capacitance (NOTE 2)	C _J	20					10		pF
Typical Thermal Resistance (NOTE 3)	R θ JL	30							°C / W
Operating Temperature Rang	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

NOTES :

1. Rverse Recovery Test Condibons $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{RR} = 0.25\text{A}$
2. Measured at 1 MHz and applied reverse Voltag of 4.0VDC
3. Thermal Resistance Junction to lead

US2AB thru US2MB

SURFACE MOUNT REVERSE VOLTAGE 50 TO 1000 VOLTS

RATINGS AND CHARACTERISTIC CURVES US2AB THRUUS2MB

Fig. 1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

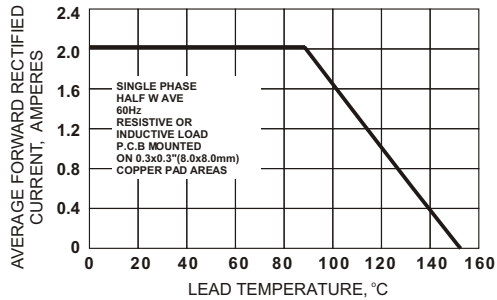


Fig. 2 - TYPICAL FORWARD CHARACTERISTICS PER ELEMENT

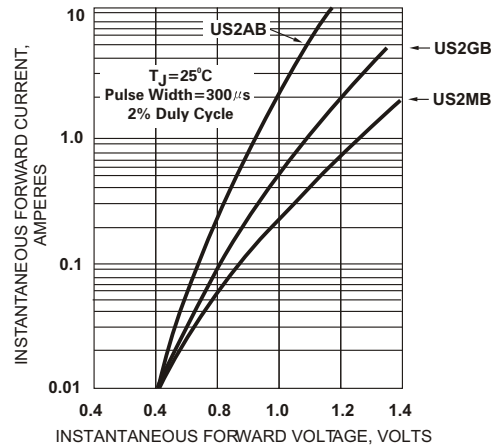


Fig. 4 - TYPICAL REVERSE CHARACTERISTICS

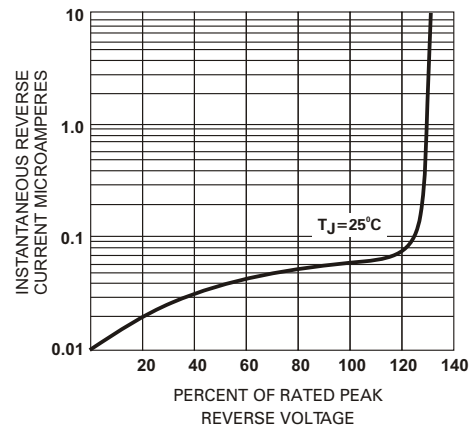


Fig. 3 - MAXIMUM FORWARD SURGE CURRENT

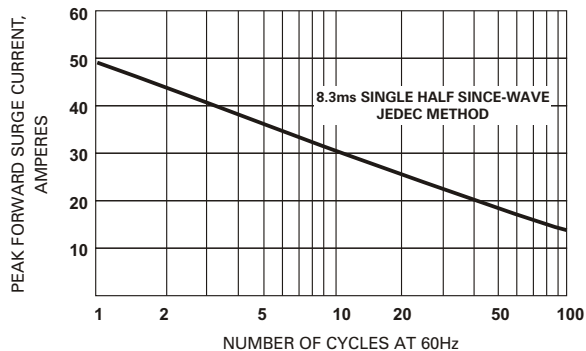


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

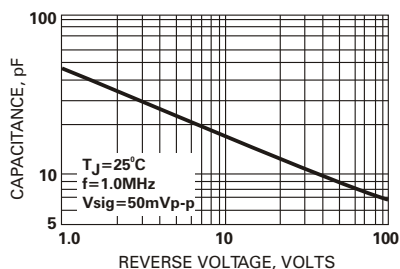


Fig. 6 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

