

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

US2AB THRU US2MB

Product specification

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

2.0 Ampere


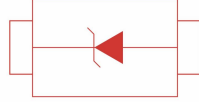
FEATURES

- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- Low forward voltage drop

MECHANICAL DATA









- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Metallurgically bonded construction
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 0.093 grams

Reference News

PACKAGE OUTLINE	PIN Configuration
	
SMB	

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

P/N(MARK)	US2AB	US2BB	US2DB	US2EB	US2GB	US2JB	US2KB	US2MB	UNITS
Marking									
Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Ta=50 C	2.0								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	60								A
Maximum Instantaneous Forward Voltage at 2.0A	1.0		1.3		1.7		V		
Maximum DC Reverse Current at Rated DC Blocking Voltage	Ta=25°C		5.0		150		μA		
	Ta=100 C						μA		
Maximum Reverse Recovery Time (Note 1)	50					75			nS
Typical Junction Capacitance (Note 2)	30								pF
Operating and Storage Temperature Range Tj, Tstg	-65 — +150								°C

NOTES:

1. Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

RATING AND CHARACTERISTIC CURVES (US2AB THRU US2MB)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

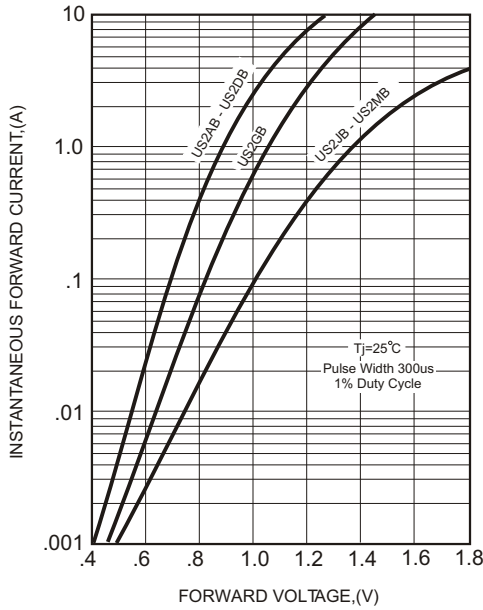


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

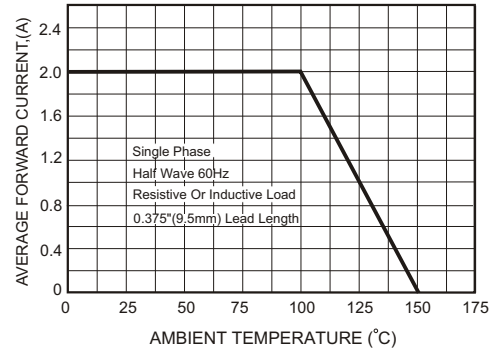
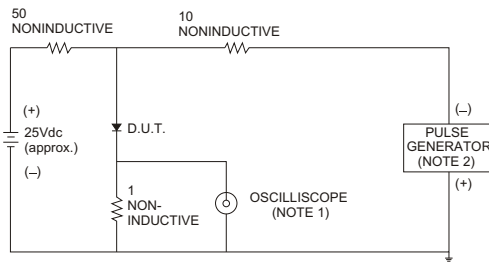


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm, 22pF.
2. Rise Time= 10ns max., Source Impedance= 50 ohms.

FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

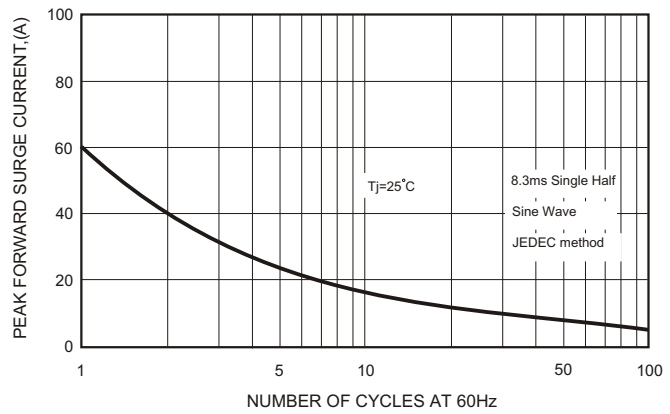
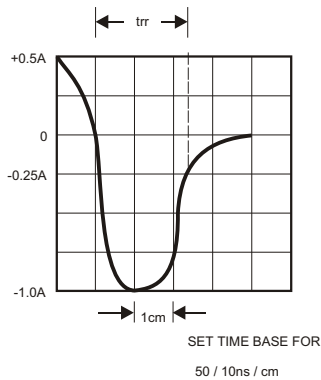
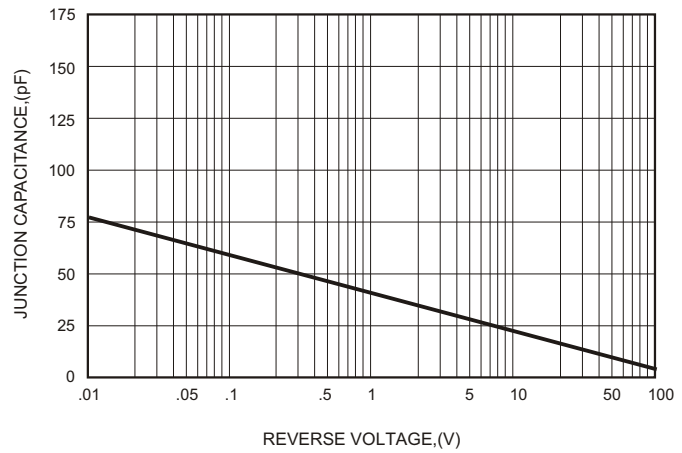
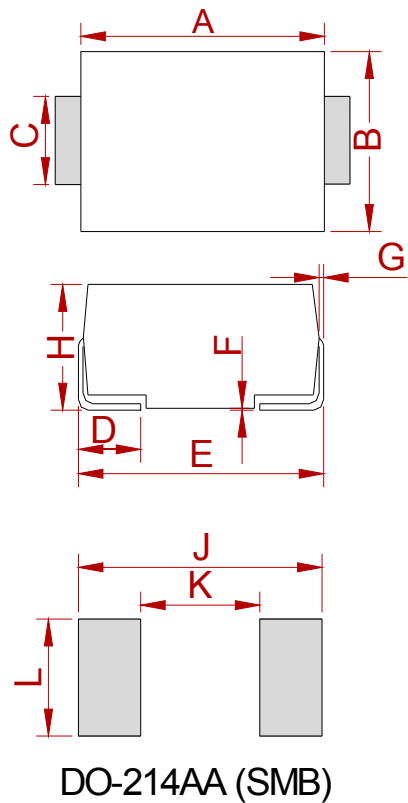


FIG.5-TYPICAL JUNCTION CAPACITANCE



PACKAGE MECHANICAL DATA



Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.25	4.75	0.167	0.187
B	3.30	3.94	0.130	0.155
C	1.85	2.21	0.073	0.087
D	0.76	1.52	0.030	0.060
E	5.08	5.59	0.200	0.220
F	0.051	0.203	0.002	0.008
G	0.15	0.31	0.006	0.012
H	2.11	2.44	0.083	0.096
J	6.80		0.270	
K		2.60		0.100
L	2.40		0.090	

REEL SPECIFICATION

P/N	PKG	QTY
US2AB THRU US2MB	SMB	3000

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