

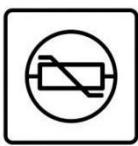
ESD



TVS



TSS



MOV



GDT



PLED

US2AB-MS THRU US2MB-MS

Product specification

VOLTAGE RANGE

50 to 1000 Volts

CURRENT

2.0 Ampere

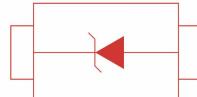
FEATURES

- 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-MS	US2BB-MS	US2DB-MS	US2EB-MS	US2GB-MS	US2JB-MS	US2KB-MS	US2MB-MS	UNITS						
Marking	US2A	US2B	US2D	US2E	US2G	US2J	US2K	US2M							
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 Ta=100 C	5.0 150							µA µA						
Maximum Reverse Recovery Time (Note 1)	50				75				nS						
Typical Junction Capacitance (Note 2)	30								pF						
Operating and Storage Temperature Range T _J , T _{STG}	-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

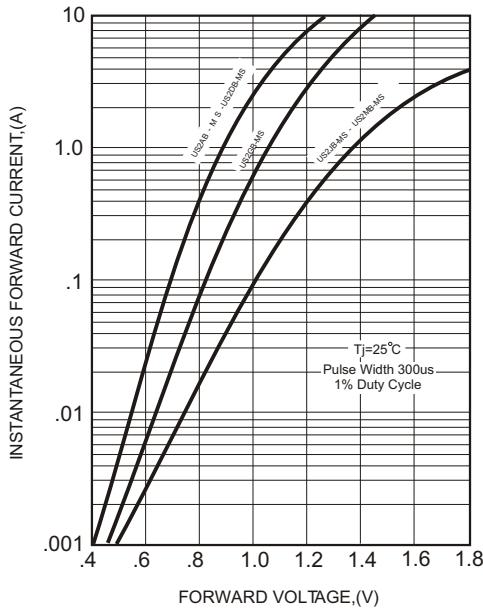
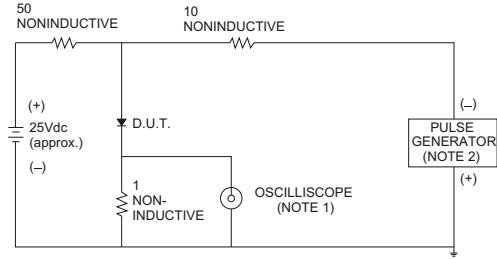


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE
RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.

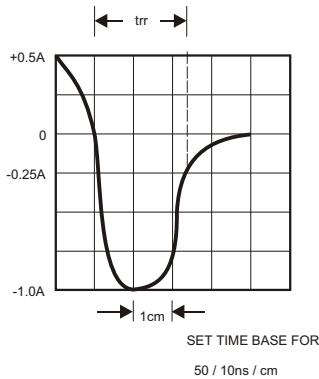


FIG.2-TYPICAL FORWARD CURRENT
DERATING CURVE

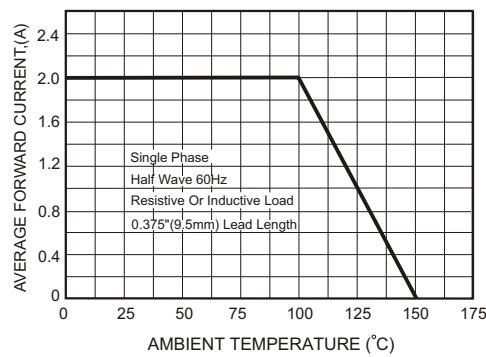


FIG.4-MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

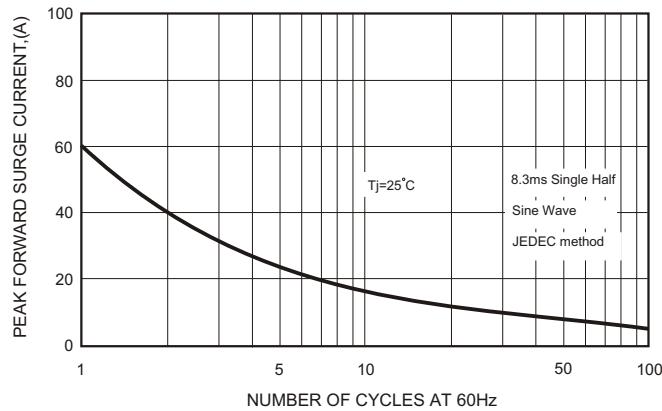
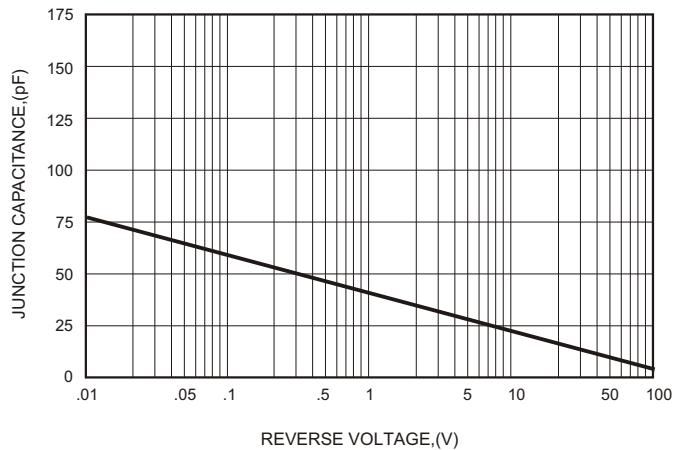
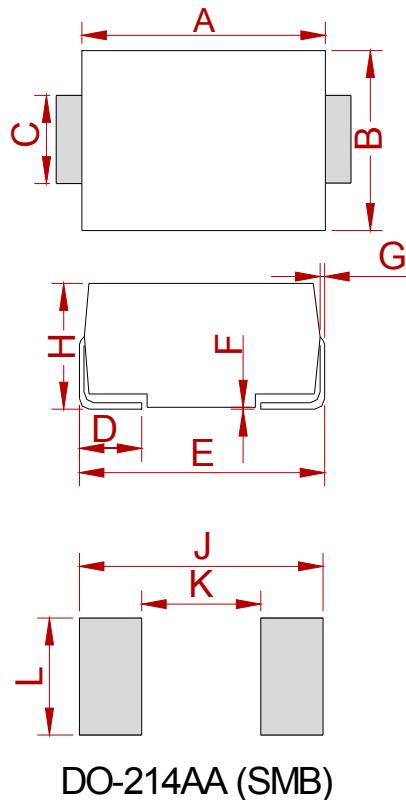


FIG.5-TYPICAL JUNCTION CAPACITANCE



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-MS THRU US2MB-MS	SMB	3000

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