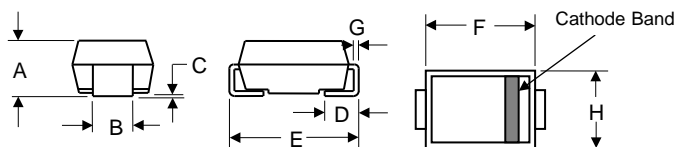


### Features

- \* Glass passivated junction chip
- \* Ideal for automated placement
- \* Low profile package
- \* Fast switching for high efficiency
- \* Moisture sensitivity level: level 1, per J-STD-020



**RoHS**  
COMPLIANT



DO-214AC(SMA)				
DIM.	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.078	0.090	1.98	2.29
B	0.052	0.058	1.32	1.47
C	---	0.008	---	0.20
D	0.030	0.052	0.76	1.32
E	0.193	0.208	4.90	5.28
F	0.157	0.177	3.99	4.50
G	0.006	0.012	0.152	0.305
H	0.100	0.110	2.54	2.79

### Mechanical Data

- \* Case: DO-214AC (SMA)
- \* Molding compound, UL flammability classification rating 94V-0
- \* Terminal: Matte tin plated leads, solderable per JESD22-B102  
Meet JESD 201 class 1A whisker test
- \* Polarity: Indicated by cathode band
- \* Weight: 0.06 g (approximately)

### Maximum Ratings and Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	US2AA	US2BA	US2DA	US2FA	US2GA	US2JA	US2KA	US2MA	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	300	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	210	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	300	400	600	800	1000	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	1.5								A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	50								A
Maximum instantaneous forward voltage (Note 1)@ 1.5 A	V <sub>F</sub>	1				1.3	1.7			V
Maximum reverse current @ rated V <sub>R</sub> T <sub>J</sub> =25 °C T <sub>J</sub> =125 °C	I <sub>R</sub>	5 100								μA
Maximum reverse recovery time (Note 2)	T <sub>rr</sub>	50					75			ns
Typical junction capacitance (Note 3)	C <sub>j</sub>	50					30			pF
Typical thermal resistance	R <sub>θJA</sub>	80								°C/W
Operating junction temperature range	T <sub>J</sub>	- 55 to +150								°C
Storage temperature range	T <sub>STG</sub>	- 55 to +150								°C

Note 1: Pulse test with PW=300μs, 1% duty cycle      Note 2: Reverse Recovery Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A

Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

### Ratings and Characteristic Curves

FIG.1 FORWARD CURRENT DERATING CURVE

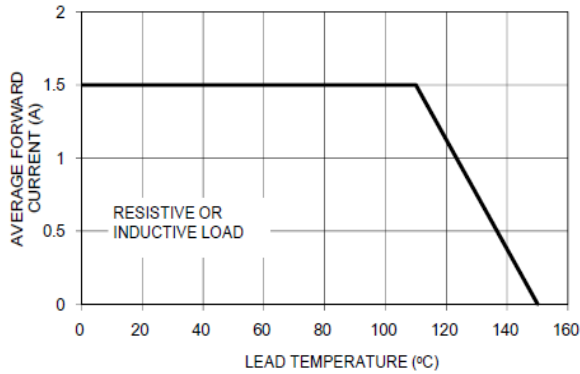


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

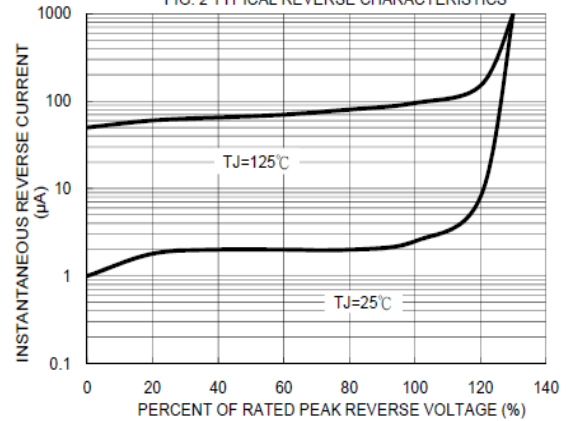


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

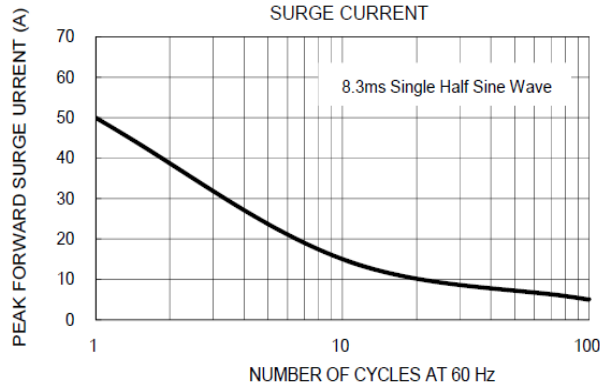


FIG. 4 TYPICAL FORWARD CHARACTERISTICS

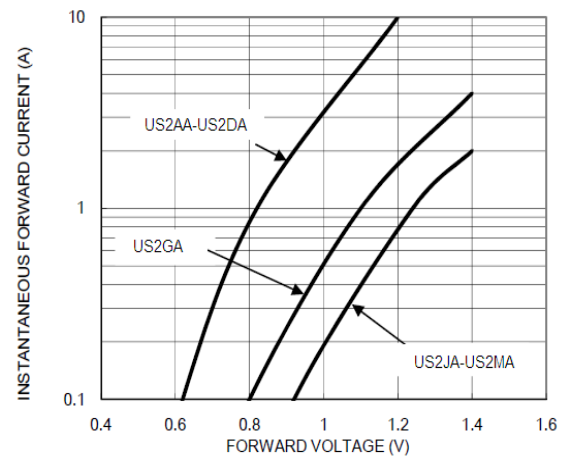


FIG. 5 TYPICAL JUNCTION CAPACITANCE

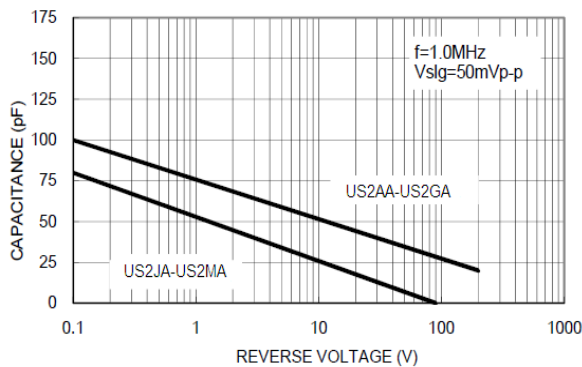
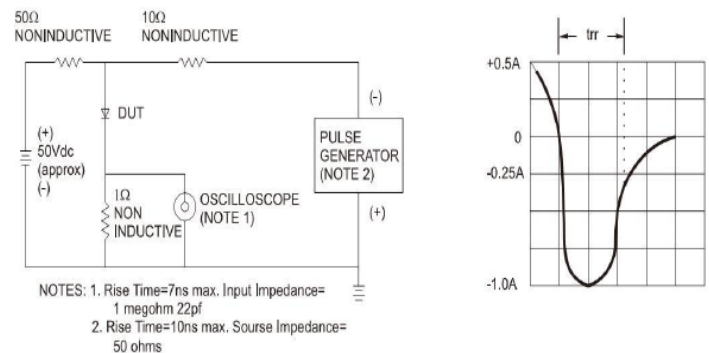


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM





## US2AA THRU US2MA

### *High Efficient Surface Mount Rectifiers*

#### Ordering Information

Part No.	Package	Packing Code	Packing
US2AA THRU US2MA	DO-214AC(SMA)	R50	5000pcs/Reel

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