



## DESCRIPTION

The US2AA~US2MA are available in SMA package

## FEATURES

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- High efficiency
- Available in SMA package

## ORDERING INFORMATION

Package Type	Part Number
SMA	US2AA
	US2BA
	US2DA
	US2GA
	US2JA
	US2KA
	US2MA
Note	SPQ: 3,000pcs/Reel
AiT provides all RoHS Compliant Products	

## MECHANICAL DATA

Case: SMA

Terminals: Solderable per MIL-STD-750,  
Method 2026

Approx. Weight: 0.055g / 0.002oz

## PIN DESCRIPTION





## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbol	US2AA	US2BA	US2DA	US2GA	US2JA	US2KA	US2MA	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_C=125^{\circ}C$	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	70							A
Maximum Instantaneous Forward Voltage at 2A	$V_F$	1.0		1.3		1.65		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$			5.0		100		$\mu A$	
Maximum Reverse Recovery Time <sup>NOTE1</sup>	$t_{rr}$	50				75			ns
Typical Thermal Resistance <sup>NOTE2</sup>	$R_{\theta JA}$ $R_{\theta JC}$					65 20			$^{\circ}C/W$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 ~150							$^{\circ}C$

NOTE1: Measured with  $I_F = 0.5 A$ ,  $I_R = 1 A$ ,  $t_{rr} = 0.25 A$

NOTE2: P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.



## TYPICAL CHARACTERISTICS

Figure. 1 Forward Current Derating Curve

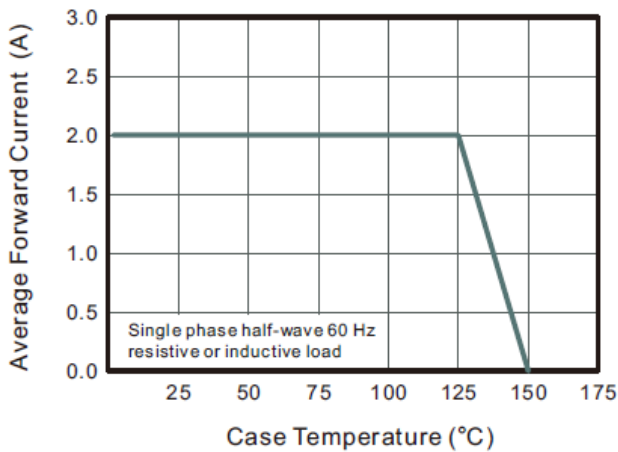


Figure. 2 Typical Reverse Characteristics

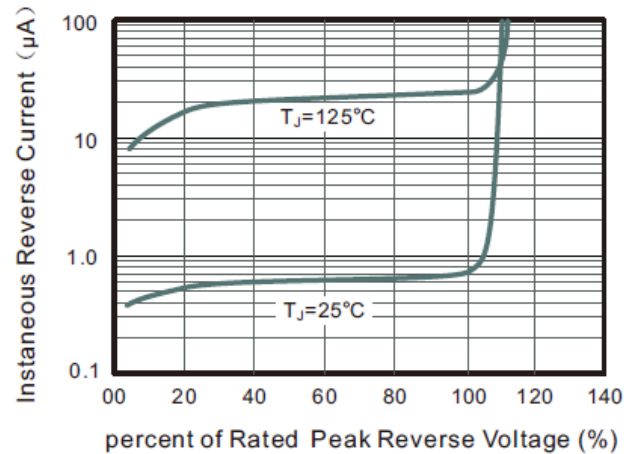


Figure. 3 Typical Forward Characteristics

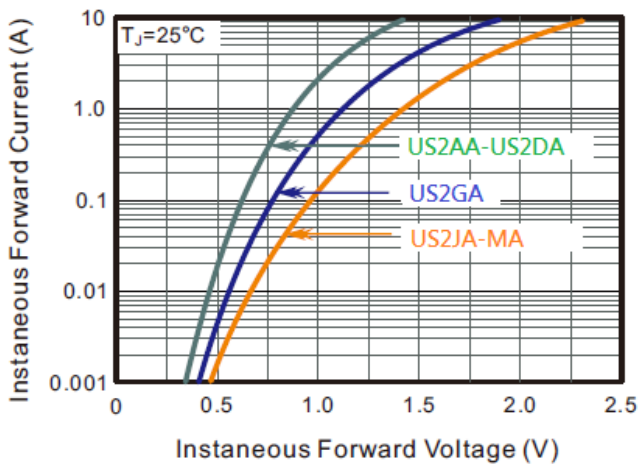
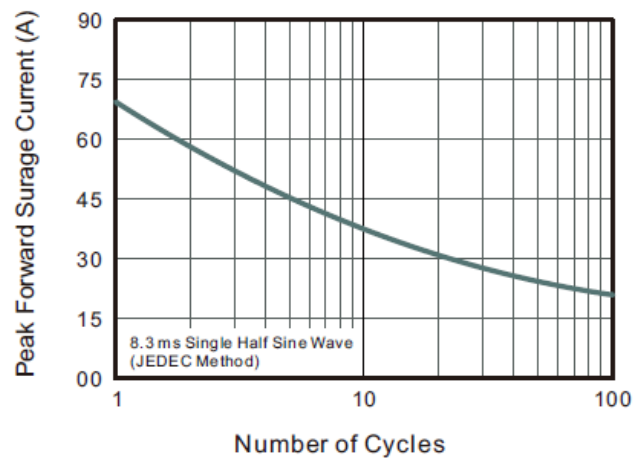


Figure. 4 Maximum Non-Repetitive Peak Forward Surge Current

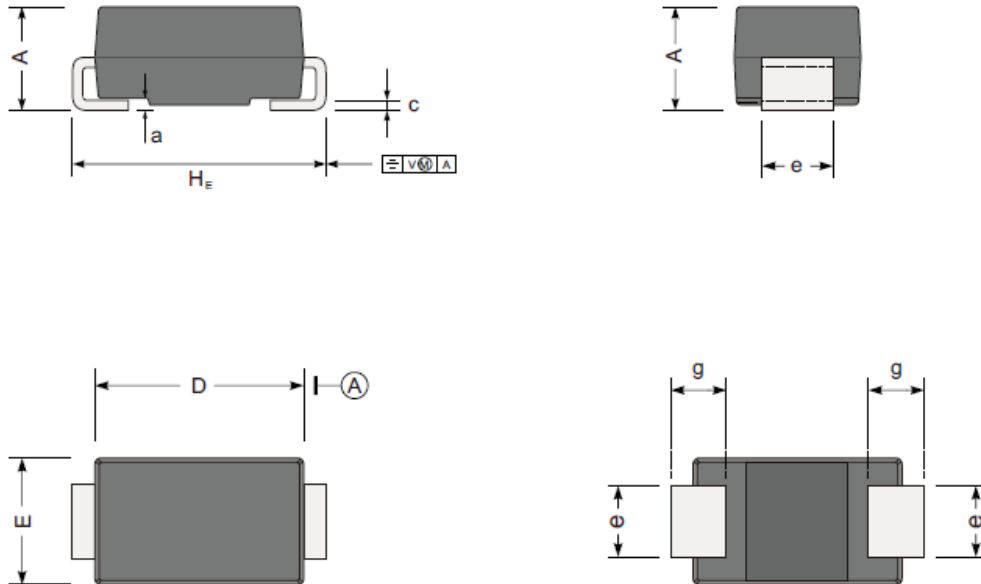




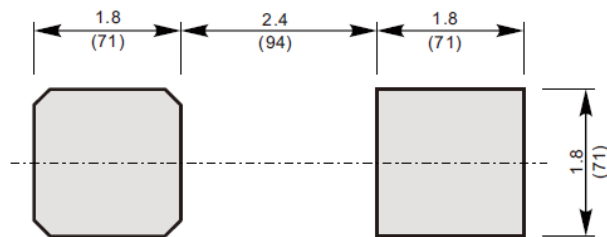
**PACKAGE INFORMATION**

Dimension in SMA (Unit: mm)

Plastic surface mounted package; 2 leads



The recommended mounting pad size



Unit :  $\frac{\text{mm}}{(\text{mil})}$

UNIT		A	D	E	He	c	e	g	a
mm	Max	2.2	4.5	2.7	5.2	0.31	1.6	1.5	0.3
	Min	1.9	4.0	2.3	4.7	0.15	1.3	0.9	
mil	Max	87	181	106	205	12	63	59	12
	Min	75	157	91	185	6	51	35	



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