



DESCRIPTION

The US2AA ~ US2MA is available in SMA package.

FEATURE

- For Surface Mounted Applications
- Low Profile Package
- Glass Passivated Chip Junction
- High Efficiency

MECHANICAL DATA

- Case: SMA
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.055g / 0.002oz

PIN DESCRIPTION



SMA



ORDERING INFORMATION

Package Type	Part Number
SMA	US2AA
	US2BA
	US2DA
	US2GA
	US2JA
	US2KA
	US2MA
Note	SPQ: 5,000pcs/Reel
AiT provides all RoHS Compliant Products	

PIN#	DESCRIPTION
1	CATHODE
2	ANODE

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C 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_{RWS}	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 $T_a=65^\circ\text{C}$	$I_{F(AV)}$	2							A
Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	70							A
Maximum Instantaneous Forward Voltage at 2A	V_F	1	1	1	1.30	1.65	1.65	1.65	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_a=25^\circ\text{C}$	5							μA
	$T_a=125^\circ\text{C}$	100							
Maximum Reverse Recovery Time	t_{rr}	50	50	50	50	75	75	75	ns
Typical Junction Capacitance	C_T	65							pF
Typical Thermal Capacitance	$R_{\theta JA}$	20							$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-55 ~ + 150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ + 150							$^\circ\text{C}$



TYPICAL PERFORMANCE CHARACTERISTICS

Fig 1. Forward Current Derating Curve

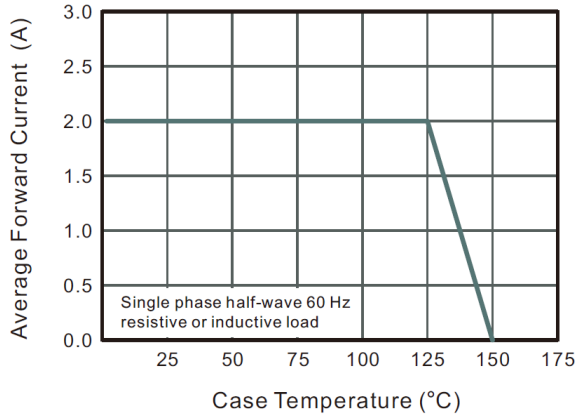


Fig 2. Typical Reverse Characteristics

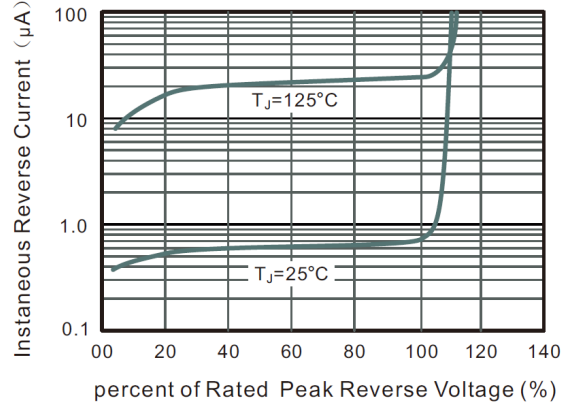


Fig 3. Typical Forward Characteristics

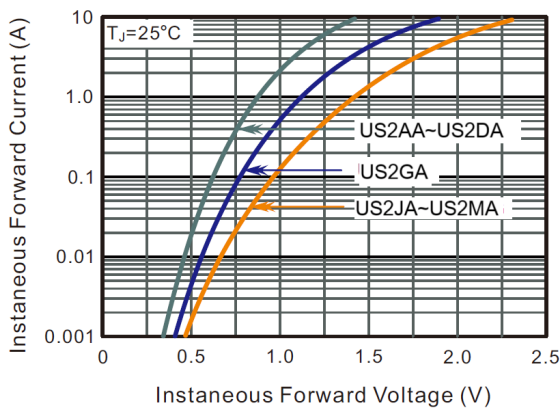
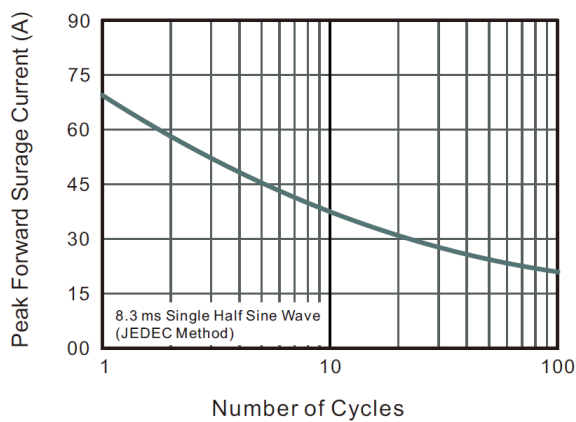


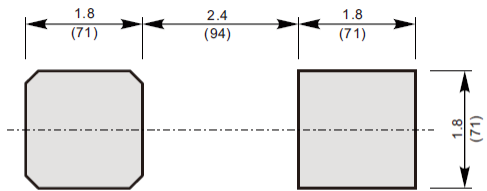
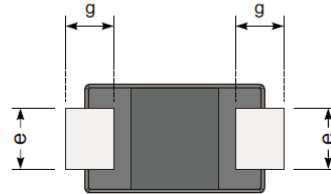
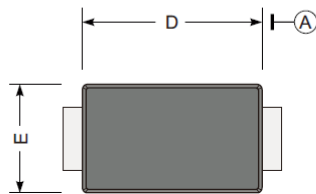
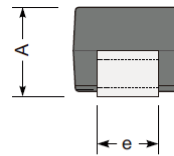
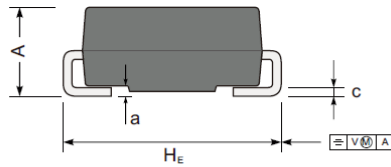
Fig 4. Maximum Non-Repetitive Peak Forward Surge Current





PACKAGE INFORMATION

Dimension in SMA Package



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

The Recommended Mounting Pad Size

DIM	MILLIMETERS	
	MIN	MAX
A	1.900	2.200
a	0.300 TYP.	
c	0.150	0.310
D	4.000	4.500
E	2.300	2.700
e	1.300	1.600
g	0.900	1.500
H _E	4.700	5.200



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