

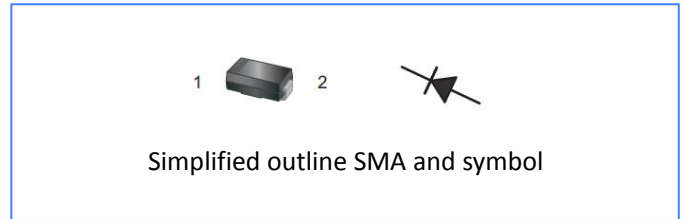
RS2A THRU RS2M

Features

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- Fast reverse recovery time
- Lead free in comply with EU RoHS 2011/65/EU directives

Mechanical Data

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



Pinning

PIN	DESCRIPTION
1	Cathode
2	Anode

Absolute Maximum Ratings And Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	RS2M	Units
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 Tc = 125 °C	I _{F(AV)}	2							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I _{FSM}	50							A
Maximum Forward Voltage at 1 A	V _F	1.3							V
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta =125 °C	I _R	5 100							μ A
Typical Junction Capacitance at VR=4V f=1M	C _j	22							pF
Maximum Reverse Recovery Time ⁽¹⁾	t _{rr}	150					250	500	ns
Typical Thermal Resistance ⁽²⁾	R _{θJA} R _{θJC}	65 20							°C/W
Operating and Storage Temperature Range	T _J , T _{stg}	-55 ~ +150							°C

(1) Measured with $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 0.25\text{A}$

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

Rating And Characteristic Curves

Fig.1 Forward Current Derating Curve

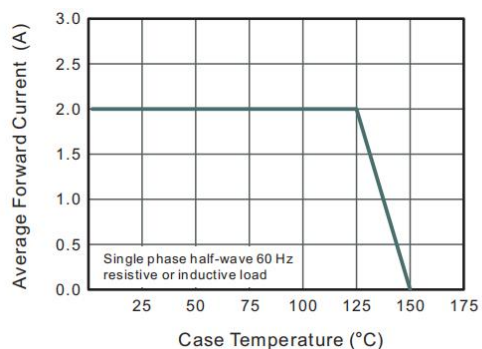


Fig.2 Typical Reverse Characteristics

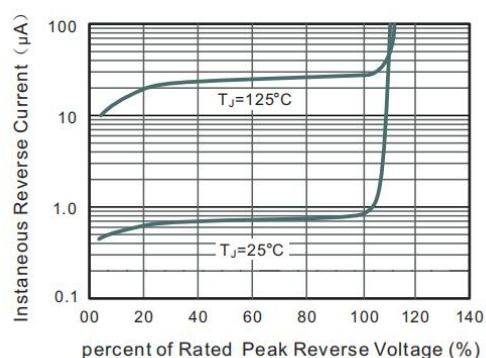


Fig.3 Typical Instantaneous Forward Characteristics

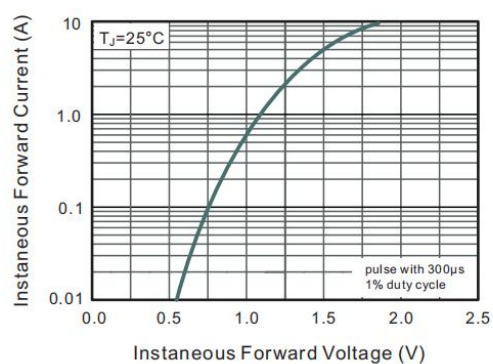


Fig.4 Typical Junction Capacitance

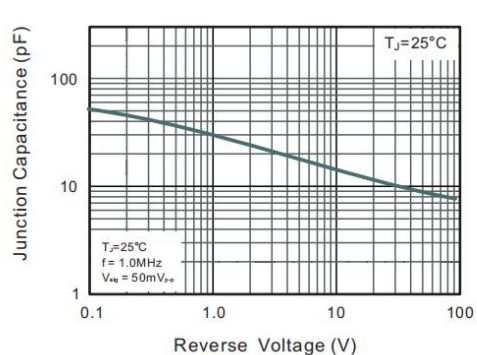
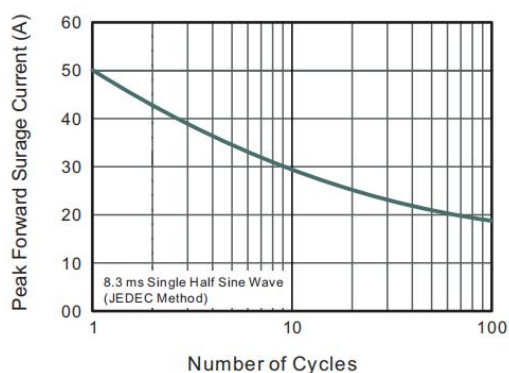


Fig.5 Maximum Non-Repetitive Peak

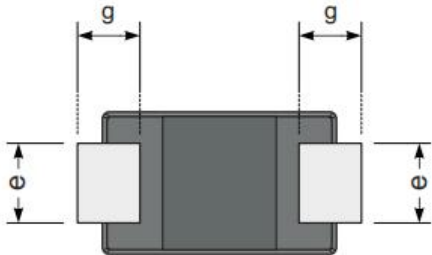
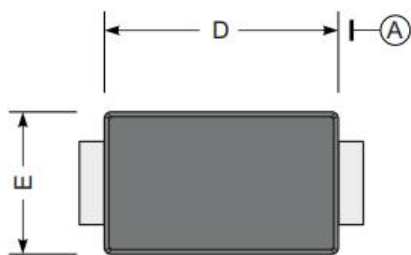
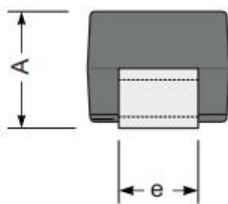
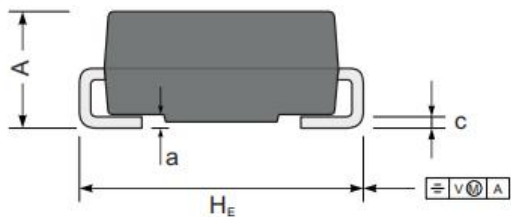
Forward Surge Current



Package Outline

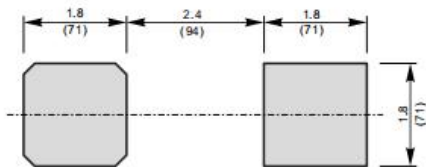
Plastic surface mounted package; 2 leads

SMA



UNIT		A	C	D	E	e	g	H _E	a
mm	max	2.2	0.31	4.5	2.7	1.6	1.5	5.2	0.3
	min	1.9	0.12	4.0	2.3	1.3	0.9	4.7	
mil	max	87	12	181	106	63	59	205	12
	min	75	6	157	91	51	35	185	

The recommended mounting pad size



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