



DESCRIPTION

The DRS1AA ~ DRS1MA are available in SMA Package

MECHANICAL DATA

Case: SMA

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

Approx. Weight: 0.055g / 0.002oz

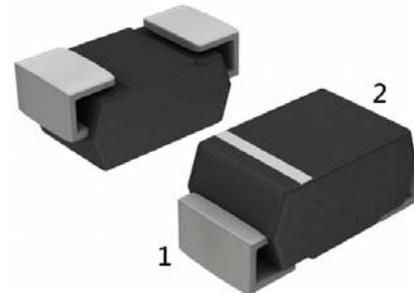
FEATURES

- 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
- Available in SMA Package

ORDERING INFORMATION

Package Type	Part Number
SMA	DRS1AA
	DRS1BA
	DRS1DA
	DRS1GA
	DRS1JA
	DRS1KA
	DRS1MA
Note	SPQ: 5,000pcs/Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION



SMA Package



PIN #	DESCRIPTION
1	CATHODE
2	ANODE



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

At 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	DRS1AA	DRS1BA	DRS1DA	DRS1GA	DRS1JA	DRS1KA	DRS1MA	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 $T_A=125^\circ\text{C}$	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	30							A
Maximum Forward Voltage at 1A	V_F	1.3							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	5.0							μA
	$T_A=125^\circ\text{C}$	50							
Typical Junction Capacitance at $V_R=4\text{V}$, $f=1\text{MHz}$		15							pF
Maximum Reverse Recovery Time (1)	t_{rr}	150				250	500		ns
Typical Thermal Resistance (2)	$R_{\theta JA}$	75							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 ~ 150							$^\circ\text{C}$

NOTE:

(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 1.0 X 1.0" (2.54 X 2.54 cm) copper pad areas.



TYPICAL CHARACTERISTICS

Fig 1. Forward Current Derating Curve

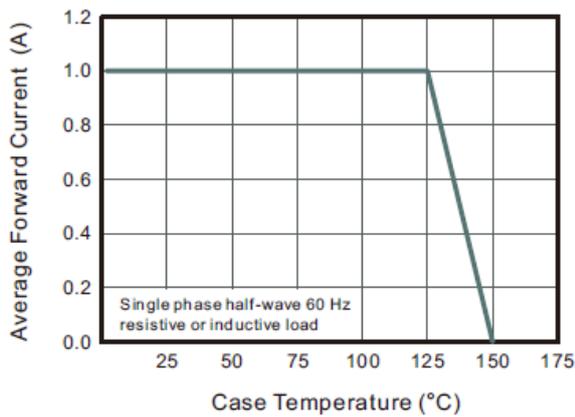


Fig 2. Typical Reverse Characteristics

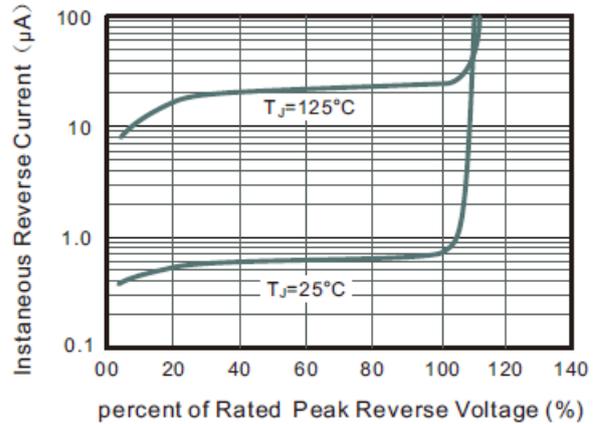


Fig 3. Typical Instantaneous Forward Characteristics

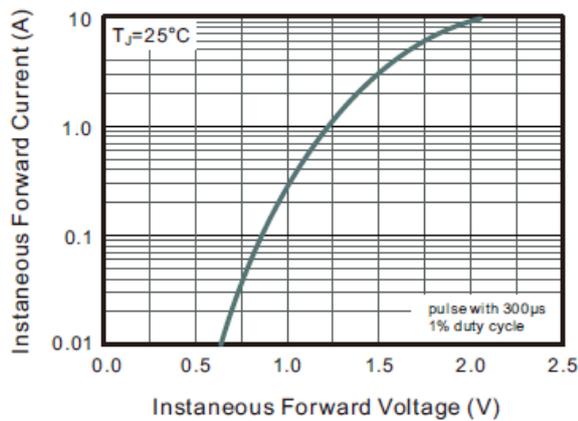


Fig4. Typical Junction Capacitance

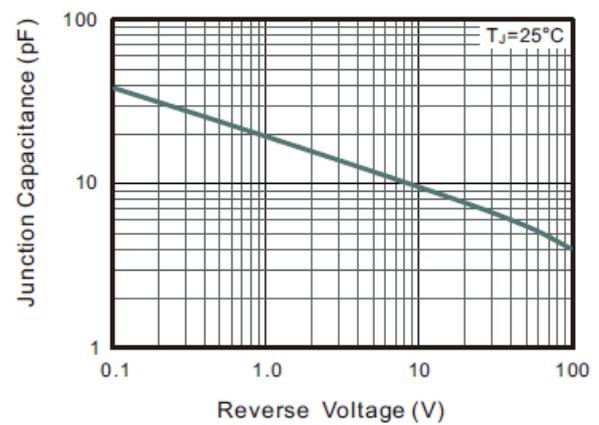
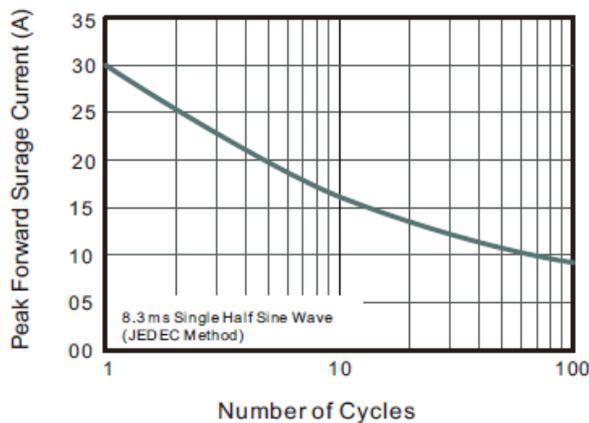


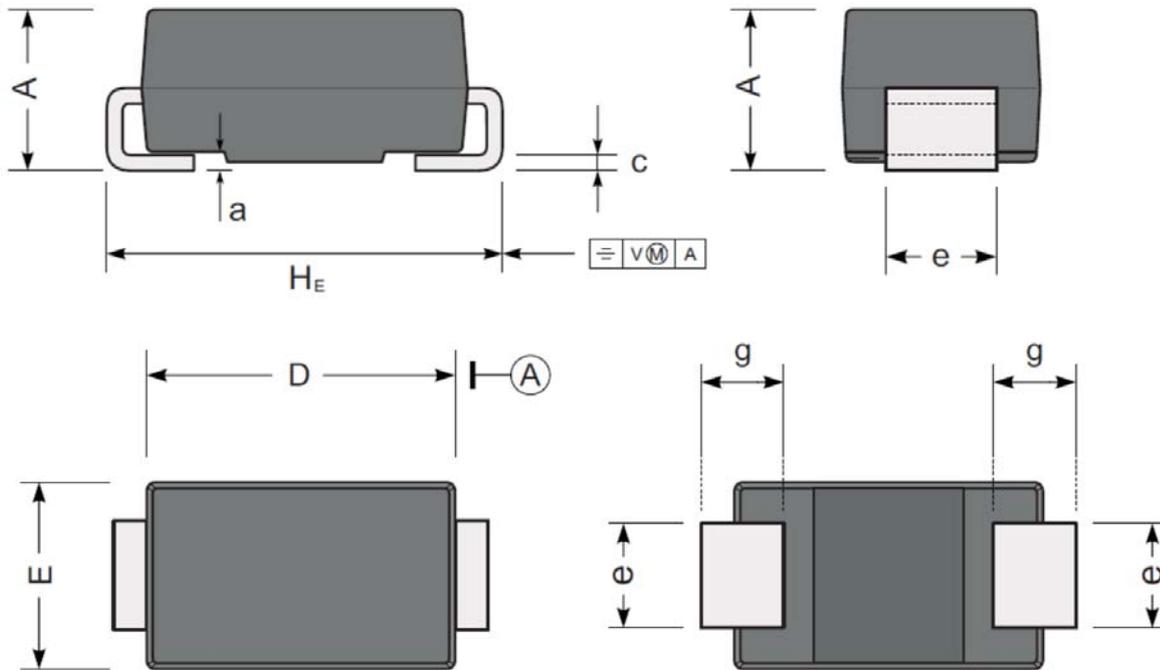
Fig 5. Maximum Non-Repetitive Peak Forward Surge Current





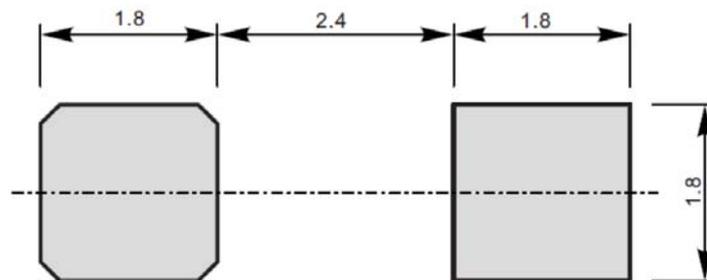
PACKAGE INFORMATION

Dimension in SMA (Unit: mm)



UNIT		A	D	E	H _E	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	

Recommended Pad Layout





IMPORTANT NOTICE

AiT Components (AiT) reserves the right to make changes to any its product, specifications, to discontinue any integrated circuit product or service without notice, and advises its customers to obtain the latest version of relevant information to verify, before placing orders, that the information being relied on is current.

AiT Components' integrated circuit products are not designed, intended, authorized, or warranted to be suitable for use in life support applications, devices or systems or other critical applications. Use of AiT products in such applications is understood to be fully at the risk of the customer. As used herein may involve potential risks of death, personal injury, or severe property, or environmental damage. In order to minimize risks associated with the customer's applications, the customer should provide adequate design and operating safeguards.

AiT Components assumes to no liability to customer product design or application support. AiT warrants the performance of its products of the specifications applicable at the time of sale.