DESCRIPTION

The DRS1AG ~ DRS1MG are available in SMA Package

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
- Available in SMA Package

ORDERING INFORMATION

Package Type	Part Number
SMA	DRS1AG
	DRS1BG
	DRS1DG
	DRS1GG
	DRS1JG
	DRS1KG
	DRS1MG
Note	SPQ: 5,000pcs/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°C ambient temperature unless otherwise specified. Single phase, half wave 60 Hz, resistive or inductive load, for capacitive load, derate current by 20 %.

Parameter		Symbol	DRS1AG	DRS1BG	DRS1DG	DRS1GG	DRS1JG	DRS1KG	DRS1MG	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°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°C T_A=125°C	I_R	5.0 50							μA
Typical Junction Capacitance at VR=4V, f=1MHz			15							pF
Maximum Reverse Recovery Time[NOTE1]		t_{rr}	150				250	500		ns
Typical Thermal Resistance [NOTE2]		$R_{\theta JA}$	75							°C/W
Operating and Storage Temperature Range		T_J, T_{STG}	-55 ~150							°C

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

NOTE2:P.C.B. mounted with 1.0 X 1.0" (2.54 X 2.54 cm) copper pad areas.

TYPICAL CHARACTERISTICS

Figure. 1 Forward Current Derating Curve

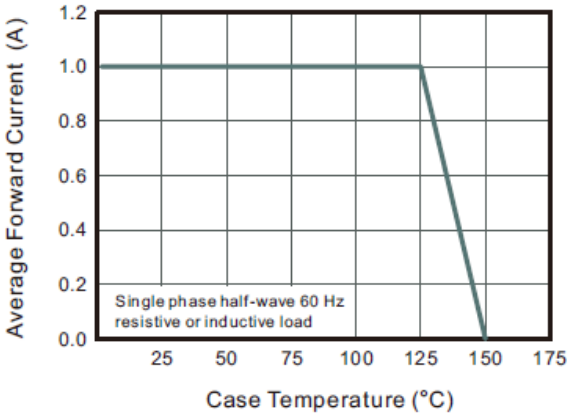


Figure. 2 Typical Reverse Characteristics

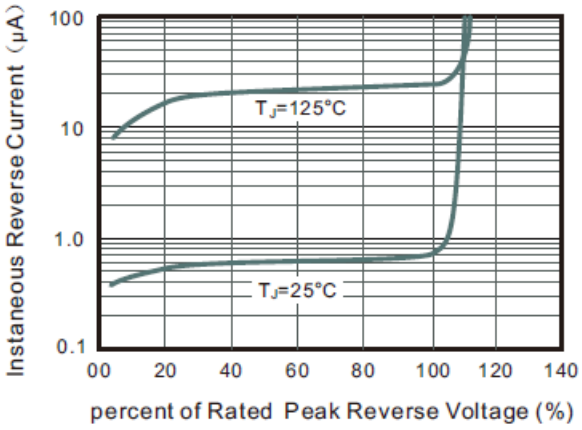


Figure. 3 Typical Instantaneous Forward Characteristics

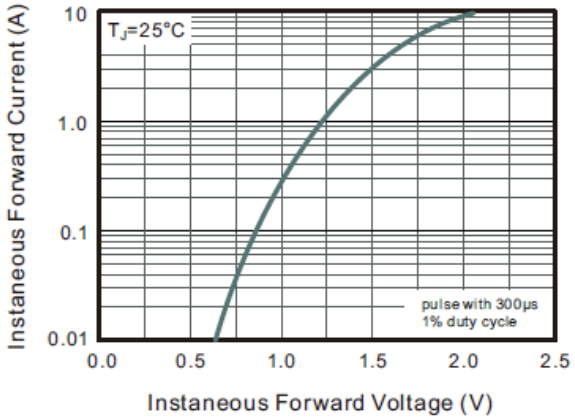


Figure. 4 Typical Junction Capacitance

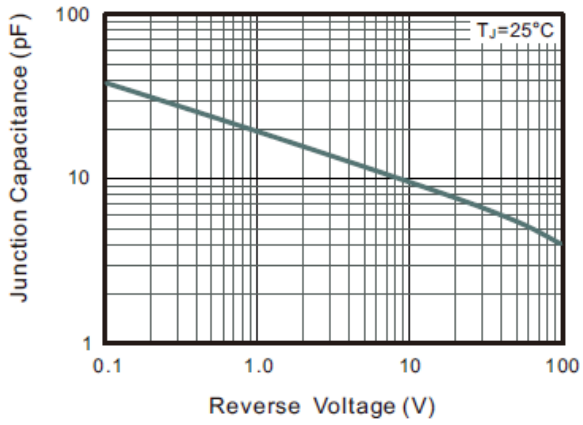
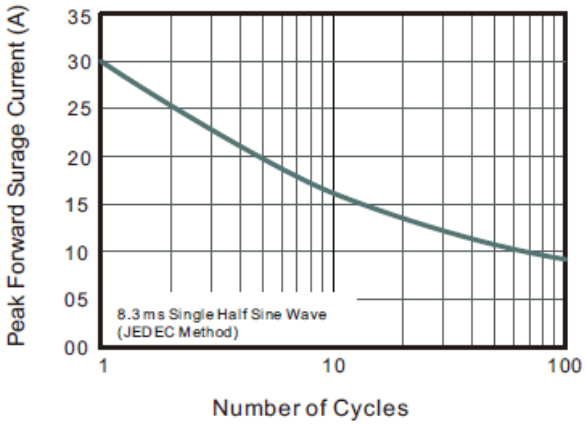


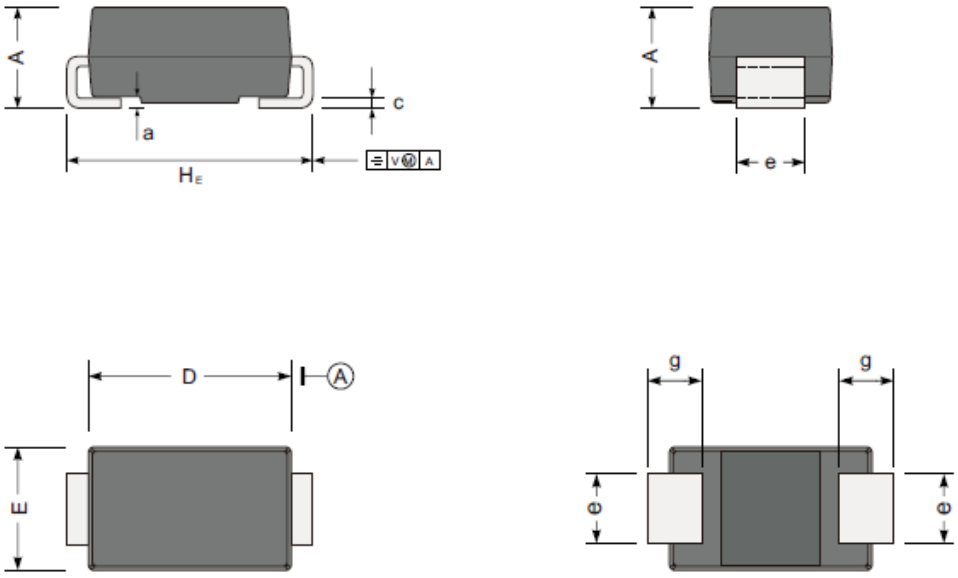
Figure. 5 Maximum Non-Repetitive Peak Forward Surge Current



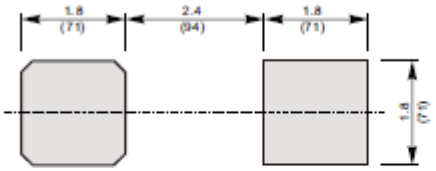
PACKAGE INFORMATION

Dimension in SMA (Unit: mm)

Plastic surface mounted package; 2 leads



The recommended mounting pad size



Unit : mm (mil)

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	
mil	Max	87	181	106	205	12	63	59	12
	Min	75	157	91	185	6	51	35	

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