

**Surface Mount Fast Recovery Rectifiers****Reverse Voltage - 1000 V****Forward Current - 2 A****FEATURES**

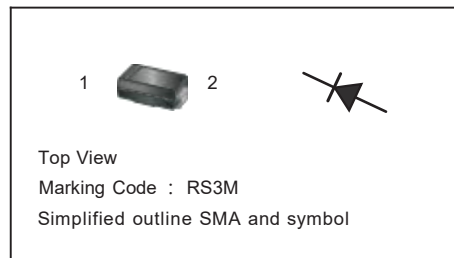
- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- Fast reverse recovery time
- Lead free in comply with EU RoHS 2011/65/EU directives

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% .

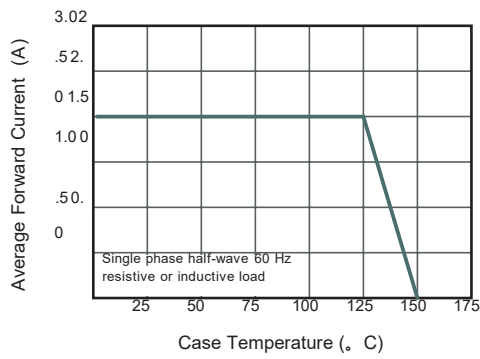
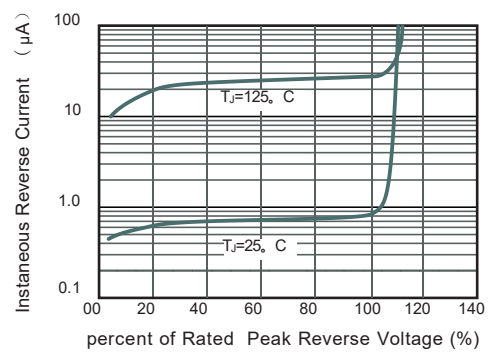
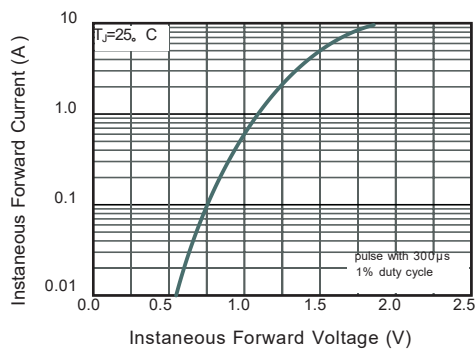
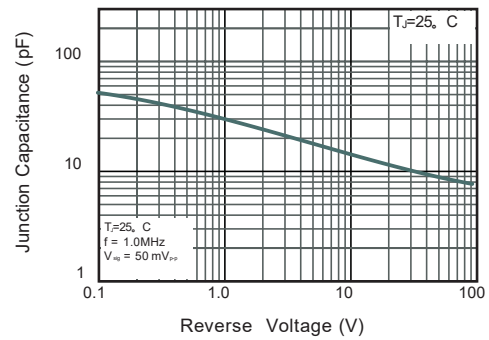
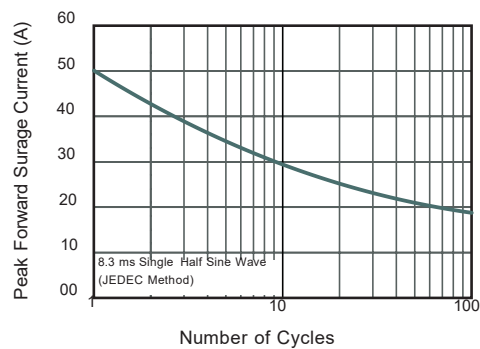
Parameter	Symbols	RS3M	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Maximum Average Forward Rectified Current at $T_c = 125$ °C	$I_{F(AV)}$	2	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	50	A
Maximum Forward Voltage at 2 A	V_F	1.3	V
Maximum DC Reverse Current $T_a = 25$ °C Rated DC Blocking Voltage $T_a = 125$ °C	I_R	5 100	μA
Typical Junction Capacitance at $V_R = 4V$, $f = 1MHz$	C_j	22	pF
Maximum Reverse Recovery Time ^(1)	t_{rr}	500	ns
Typical Thermal Resistance ^(2)	$R_{\theta JA}$ $R_{\theta JC}$	65 20	°C/W
Operating and Storage Temperature Range	T_j , T_{stg}	-55 ~ +150	°C

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

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



Typical Characteristics

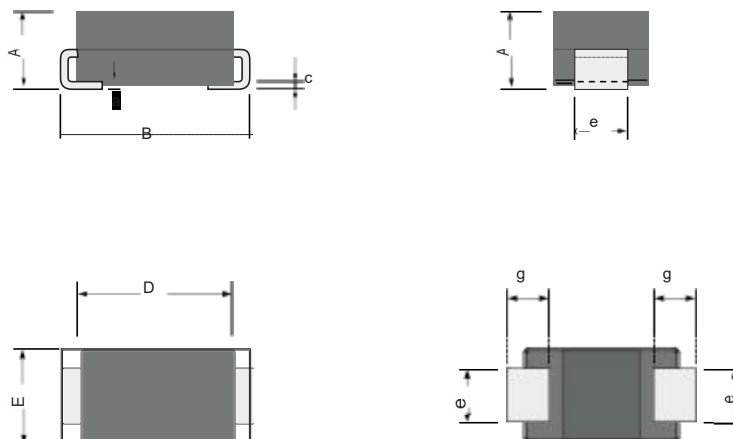
Fig.1 Forward Current Derating Curve**Fig.2 Typical Reverse Characteristics****Fig.3 Typical Instantaneous Forward Characteristics****Fig.4 Typical Junction Capacitance****Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



PACKAGE OUTLINE

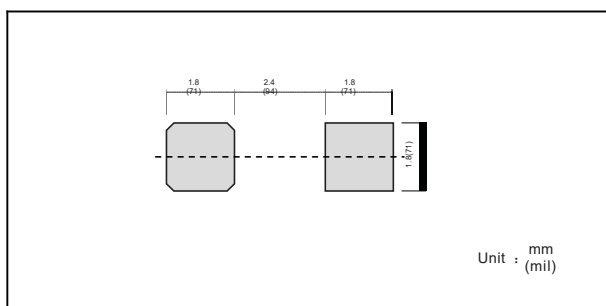
Plastic surface mounted package; 2 leads

SMA



UNIT		A	D	E	B	c	e	g	a
mm	max	2.2	4.5	2.8	5.3	0.31	1.6	1.5	0.3
	min	1.9	4.0	2.4	4.8	0.15	1.3	0.9	
mil	max	87	181	110	209	12	63	59	12
	min	75	157	94	189	6	51	35	

The recommended mounting pad size



Marking

Type number	Marking code
RS3M	RS3M