

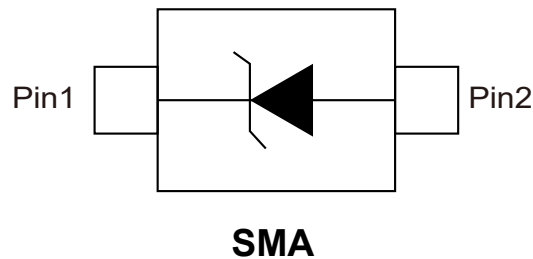
## 1.Features

- Plastic package has underwrites laboratory flammability Classification 94V-0
- Low profile surface mount package
- Built-in strain relief
- Fast switching for high efficiency
- Glass passivated chip junction
- High temperature soldering
- 250°C/10 second at terminals

## 2.Mechanical Data

- Case: JEDED DO-214AC molded plastic over glass passivated chip
- Weight: 0.002ounce, 0.064 gram
- Terminals: Solder plated, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end

## 3.Pinning information





#### 4. Maximum Ratings And Electrical Characteristics

Parameter	Symbols	RS1A	RS1B	RS1D	RS1G	RS1J	RS1K	RS1M	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	c
Maximum average forward rectified current at $T_L=90^\circ\text{C}$	$I_{F(AV)}$	1							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) $T_L=90^\circ\text{C}$	$I_{FSM}$	30							Amps
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	105							$^\circ\text{C/W}$
	$R_{\theta JL}$	32							$^\circ\text{C/W}$
Junction and storage temperature range	$T_J, T_{STG}$	-55 to 150							$^\circ\text{C}$
Maximum Instantaneous Forward Voltage at 1.0A	$V_F$	1.3							Volts
Maximum DC Reverse Current at rated DC Blocking Voltage	$I_R$	5							$\mu\text{A}$
		50							$\mu\text{A}$
Typical Reverse Recovery Time at $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{RR}=0.25\text{A}$	$t_{rr}$	150				250	500		ns
Typical junction capacitance at 4.0V, 1MHz	$C_J$	30					7		pF

Ratings at  $25^\circ\text{C}$  ambient temperature unless otherwise specified

Notes:

1. Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B. with  $0.2 \times 0.2'' (5.0 \times 5.0\text{mm})$  copper pad areas.



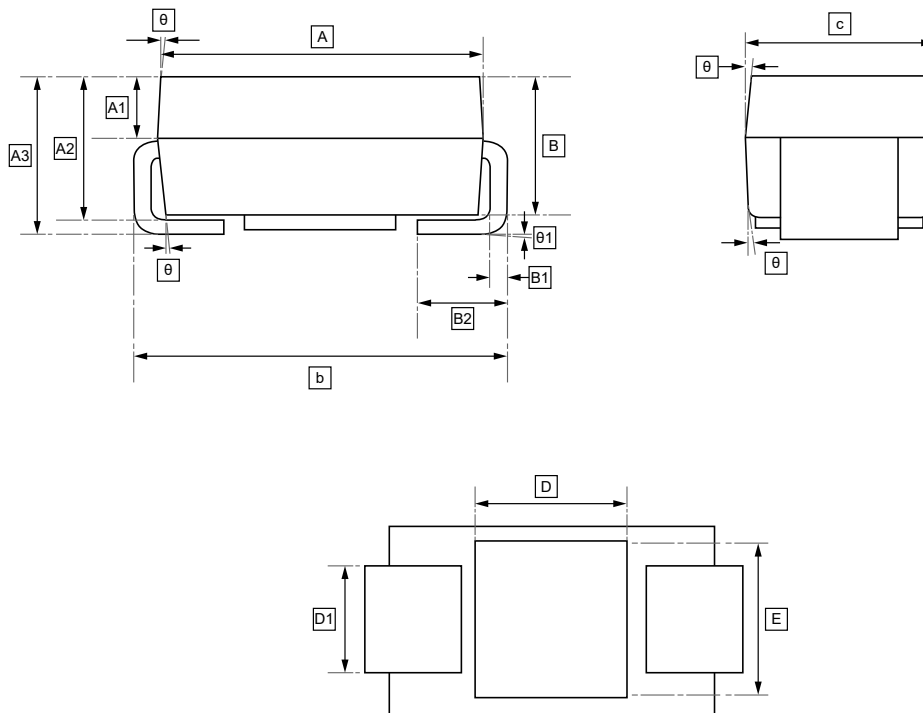
## 5. Typical characteristic

<p>Figure 1: Forward Current Derating Curve</p>	<p>Figure 2: Maximum Non-repetitive Peak Forward Surge Current</p>
<p>Figure 3: Typical Instantaneous Forward Characteristics</p>	<p>Figure 4: Typical Reverse Characteristics</p>
<p>Figure 5: Typical Junction Capacitance</p>	<p>Figure 6: Typical Transient Thermal Impedance</p>



VOLTAGE RANGE 50 to 1000 Volts  
CURRENT 1.0 Ampere

## 6.SMA Package Outline Dimensions



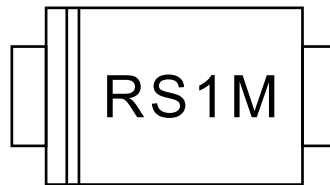
### DIMENSIONS (mm are the original dimensions)

Symbol	A	A1	A2	A3	B	B1	B2	b	c	D	D1	E
Min	4.25	0.88	2.07	2.10	1.87	0.18	1.10	4.95	2.47	2.00	1.40	2.10
Max	4.35	0.92	2.13	2.30	1.93	(typ.)	1.30	5.05	2.53	(typ.)	(typ.)	(typ.)

Symbol	θ	θ1
Min	5°	0°
Max	(typ.)	3°



## 7 .Ordering information



Order Code	Package	Base QTY	Delivery Mode
UMW RS1A	SMA	2000	Tape and reel
UMW RS1B	SMA	2000	Tape and reel
UMW RS1D	SMA	2000	Tape and reel
UMW RS1G	SMA	2000	Tape and reel
UMW RS1J	SMA	2000	Tape and reel
UMW RS1K	SMA	2000	Tape and reel
UMW RS1M	SMA	2000	Tape and reel



## 8.Disclaimer

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