

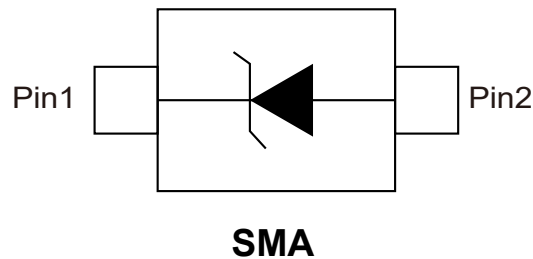
1.Features

- 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							μA
		50							μA
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°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

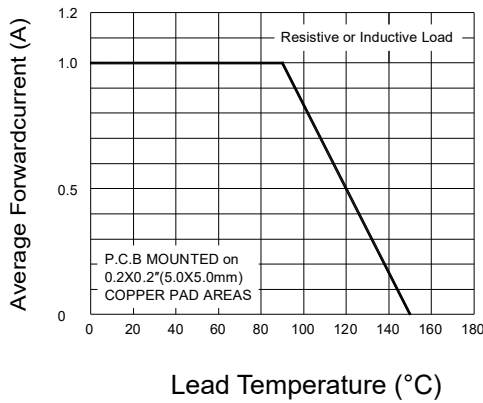


Figure 1: Forward Current Derating Curve

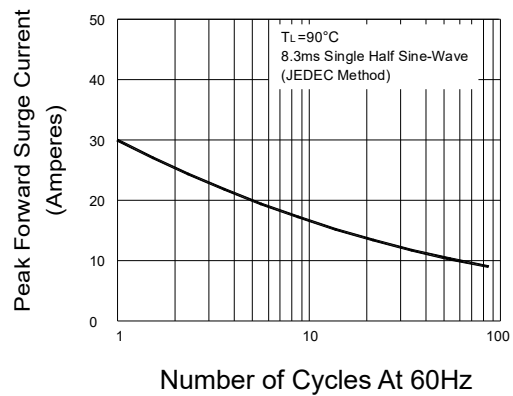


Figure 2: Maximum Non-repetitive Peak Forward Surge Current

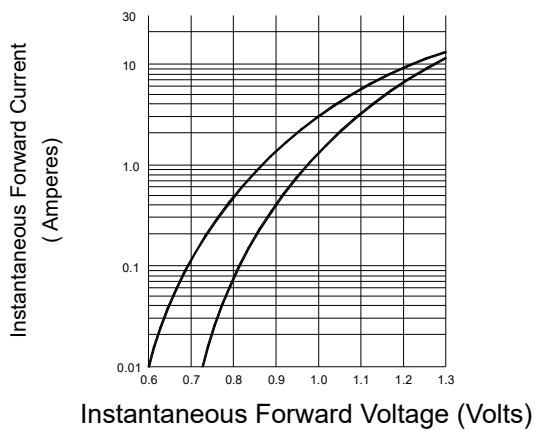


Figure 3: Typical Instantaneous Forward Characteristics

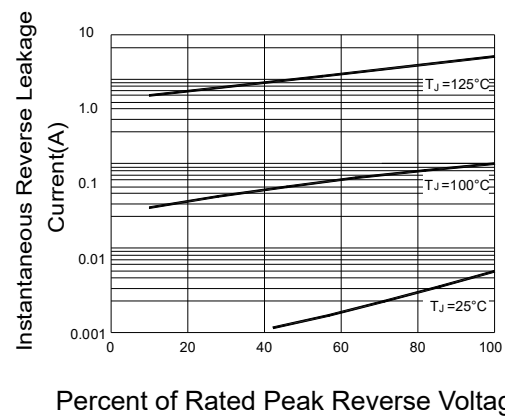


Figure 4: Typical Reverse Characteristics

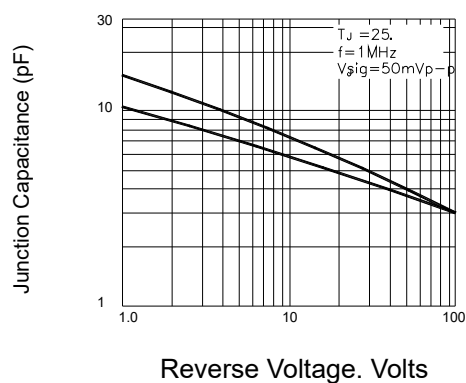


Figure 5: Typical Junction Capacitance

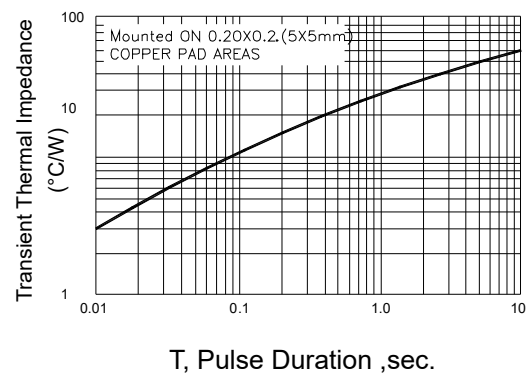
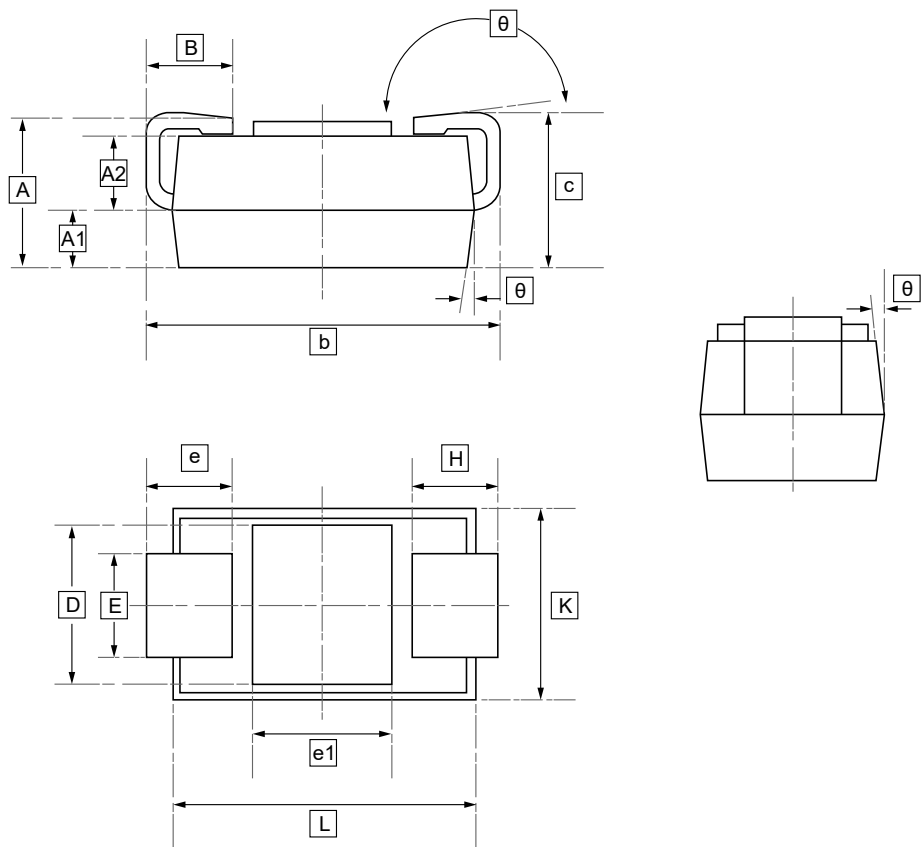


Figure 6: Typical Transient Thermal Impedance



6.SMA Package Outline Dimensions



DIMENSIONS (mm are the original dimensions)

Symbol	A	A1	A2	B	b	c	D	E	e1	L	K	θ
Min	1.95	0.77	0.97	1.10	4.95	2.00	2.09	1.38	1.95	4.25	2.60	0°
Max	2.05	0.83	1.03	1.30	5.15	2.20	2.19	1.42	2.05	4.35	2.65	5°

Notes: e-H<0.15mm



VOLTAGE RANGE 50 to 1000 Volts
CURRENT 1.0 Ampere

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



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