

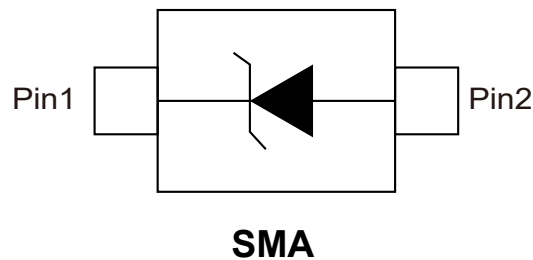
1.Features

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency
- inverters, free wheeling, and polarity protection applications

2.Mechanical Data

- Case: SMA
- Approx. Weight: 60mg / 0.0021oz
- Terminals: Solderable per MIL-STD-750 Method 2026

3.Pinning information





4. Maximum Ratings And Electrical Characteristics

Parameter	Symbols	SS 52	SS 54	SS 56	SS 58	SS 510	SS 512	SS 515	SS 520	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	40	60	80	100	120	150	200	V
Maximum RMS Voltage	V _{RMS}	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	V _{DC}	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	I _{F(AV)}	5								A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	125								A
Max Instantaneous Forward Voltage at 5 A		V _F		0.55		0.70		0.85		V
Maximum DC Reverse Current	T _A =25°C	I _R		1.0						mA
at Rated DC Blocking Voltage	T _A =100°C			50						mA
Typical Junction Capacitance (Note1)		C _J		200						pF
Typical Thermal Resistance (Note 2)		R _{θJA}		60						°C/W
Junction Temperature Range		T _J		-55 to 150						°C
Storage Temperature Range		T _{STG}		-55 to 150						°C

Absolute Maximum Ratings and Electrical characteristics Ratings at ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.



5. Typical characteristic

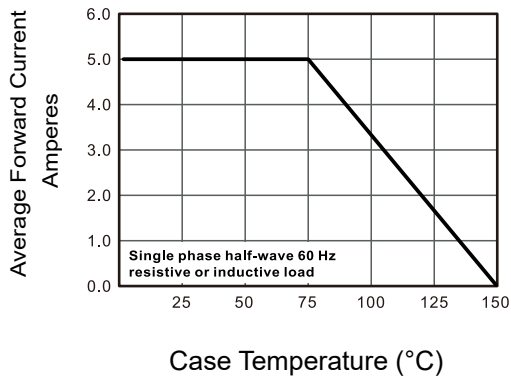


Figure 1: Forward Current Derating Curve

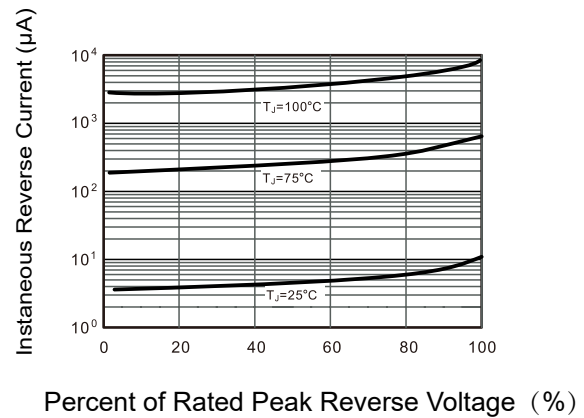


Figure 2: Typical Reverse Characteristics

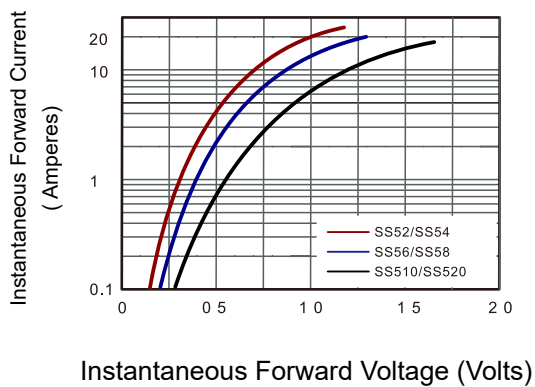


Figure 3: Typical Forward Characteristic

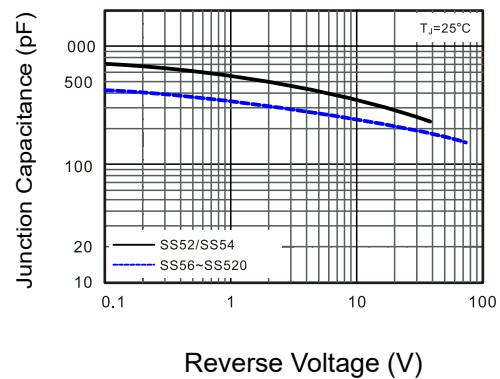


Figure 4: Typical Junction Capacitance

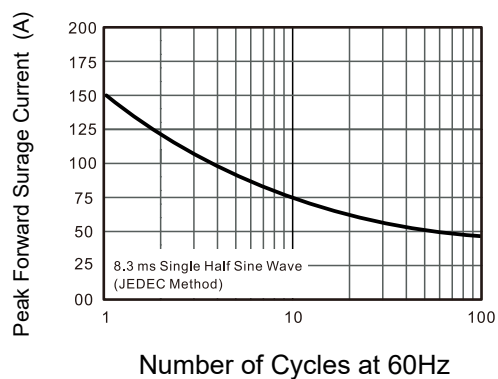


Figure 5: Maximum Non-Repetitive Peak Forward Surge Current

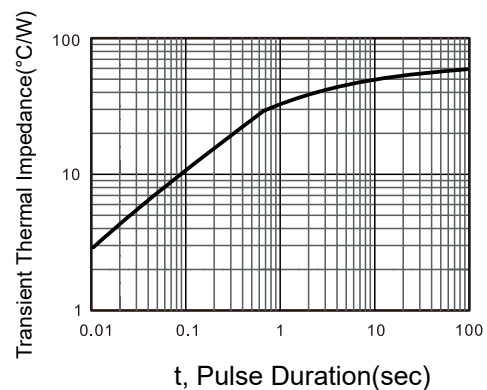
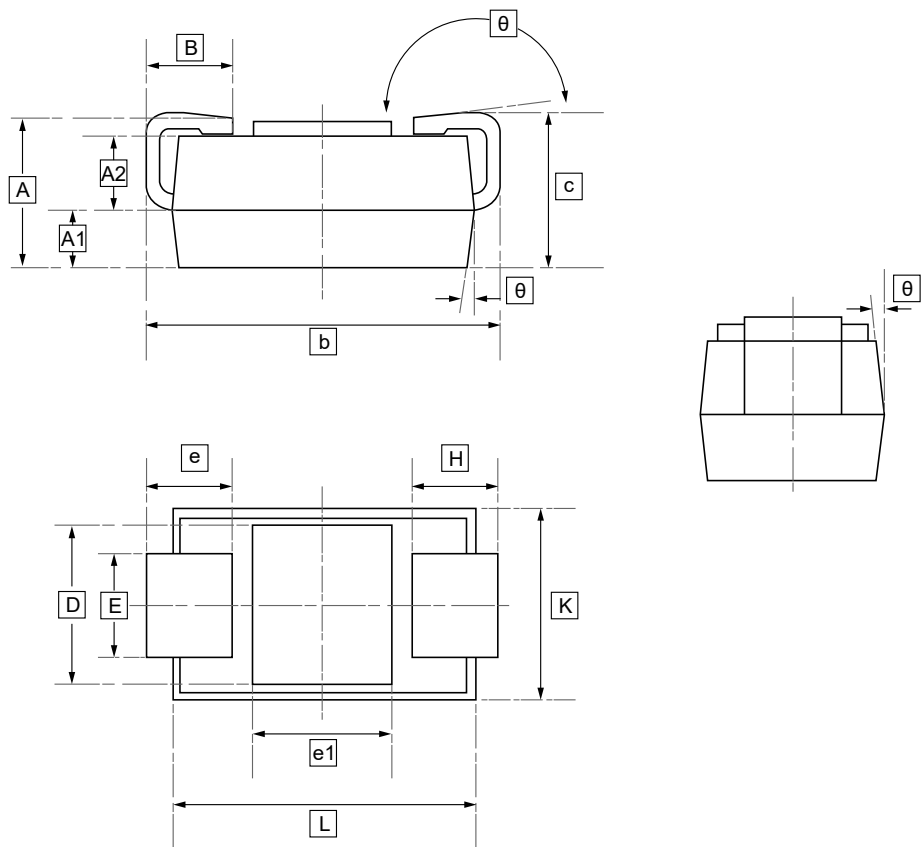


Figure 6: Typical Transient Thermal Impedance



6.SMA Package Outline Dimensions



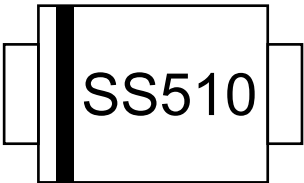
DIMENSIONS (mm are the original dimensions)

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



7 .Ordering information



Order Code	Marking	Package	Base QTY	Delivery Mode
UMW SS52	SS52	SMA	2000	Tape and reel
UMW SS54	SS54	SMA	2000	Tape and reel
UMW SS56	SS56	SMA	2000	Tape and reel
UMW SS58	SS58	SMA	2000	Tape and reel
UMW SS510	SS510	SMA	2000	Tape and reel
UMW SS512	SS512	SMA	2000	Tape and reel
UMW SS515	SS515	SMA	2000	Tape and reel
UMW SS520	SS520	SMA	2000	Tape and reel



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