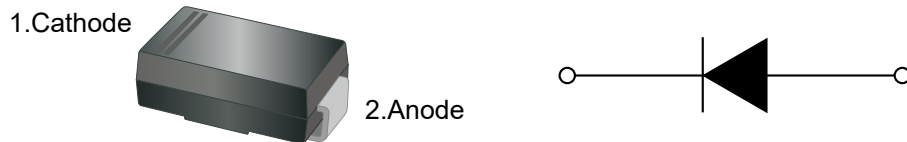


1.Features

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

2.Pinning Information





3. Absolute Maximum Ratings and Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter		Symbols	US1A	US1B	US1D	US1G	US1J	US1K	US1M	Units
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 _C =125°C		I _{F(AV)}	1							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			1.3	1.65			V
Maximum DC reverse current at at rated DC blocking voltage	T _A =25°C	I _R	5							μA
	T _A =125°C		100							μA
Maximum Reverse Recovery Time ⁽¹⁾		t _{rr}	50				75			ns
Typical Thermal Reristance ⁽²⁾		R _{θJA}	75							°C/W
Typical Junction Capacitance ⁽³⁾		C _J	15							pF
Operating and storage temperature range		T _J , T _{STG}	-55 to 150							°C

Note:

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

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

(3) Measured at 1 MHz and applied reverse voltage of 4 VDC.



4. Typical Characteristic

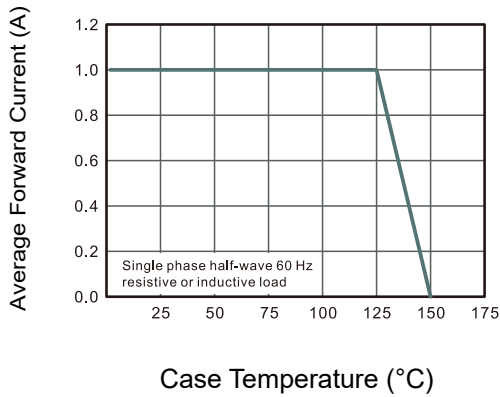


Figure 1: Forward Current Derating Curve

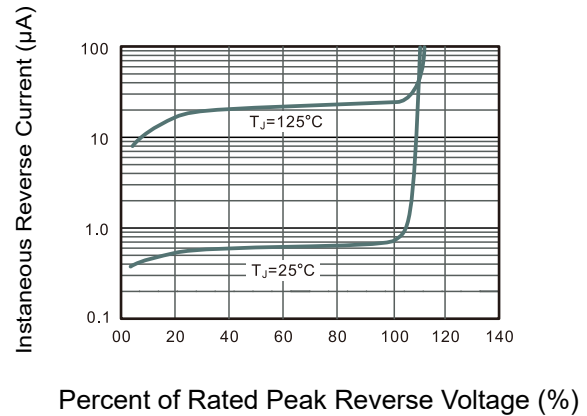


Figure 2: Typical Reverse Characteristics

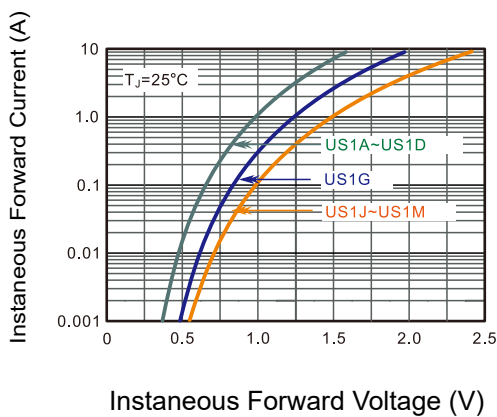


Figure 3: Typical Forward Characteristics

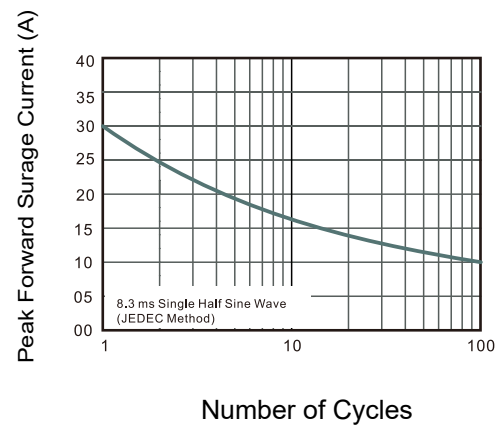


Figure 4: Maximum Non-Repetitive Peak Forward Surge Current

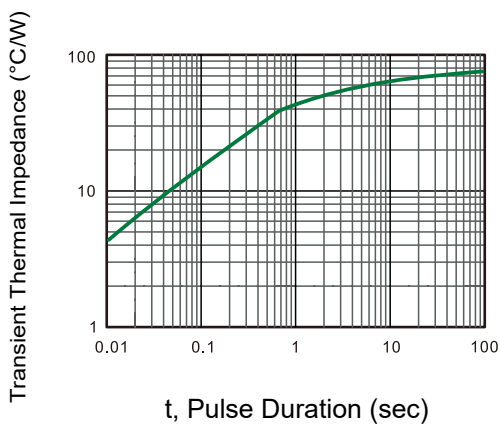


Figure 5: Typical Transient Thermal Impedance

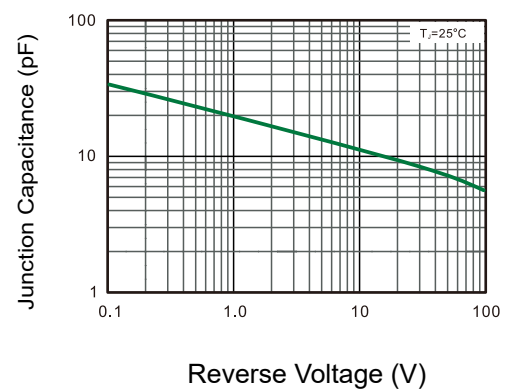
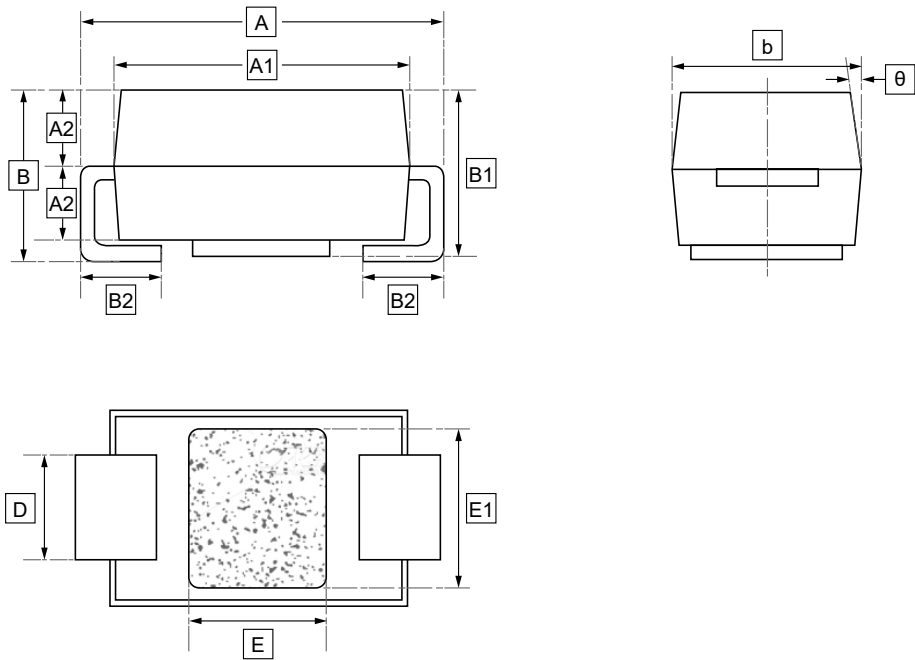


Figure 6: Typical Junction Capacitance



5.SMA Package Outline Dimensions

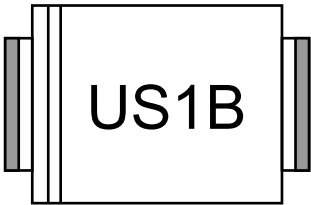


DIMENSIONS (mm are the original dimensions)

Symbol	A	A1	A2	B	B1	B2	b	D	E	E1	θ
Min	4.8	3.95	0.87	2.08	2.05	0.9	2.45	1.28	1.7	1.9	5°
Max	5.2	4.25	1.13	2.48	2.35	1.5	2.75	1.52	2.1	2.3	



6.Ordering Information



Order Code	Marking	Package	Base QTY	Delivery Mode
UMW US1A	US1A	SMA	2000	Tape and reel
UMW US1B	US1B	SMA	2000	Tape and reel
UMW US1D	US1D	SMA	2000	Tape and reel
UMW US1G	US1G	SMA	2000	Tape and reel
UMW US1J	US1J	SMA	2000	Tape and reel
UMW US1K	US1K	SMA	2000	Tape and reel
UMW US1M	US1M	SMA	2000	Tape and reel



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