

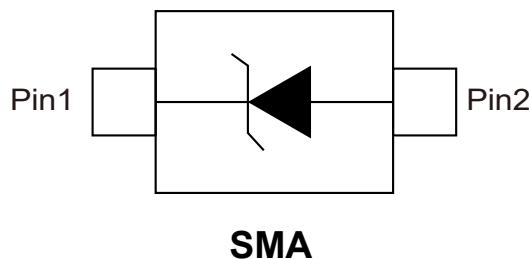
### 1. Features

- The plastic package carries Underwriters Laboratory
- Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

### 2. Mechanical Data

- Case: JEDEC DO-214AC molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.003 ounce, 0.093 grams

### 3. Pinning information





## 4. Maximum Ratings And Electrical Characteristics

Parameter	Symbols	1N 4001	1N 4002	1N 4003	1N 4004	1N 4005	1N 4006	1N 4007	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	Volts
Maximum average forward rectified current at $T_L=110^\circ\text{C}$	$I_{(AV)}$						1		Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$						30		Amps
Maximum instantaneous forward voltage at 1.0A	$V_F$				1				Volts
Maximum DC reverse current at rated DC blocking voltage	$I_R$				5				uA
$T_A=25^\circ\text{C}$									
$T_A=100^\circ\text{C}$					50				
Typical junction capacitance (NOTE 1)	$C_J$				15				pF
Typical thermal resistance (NOTE 2)	$R_{qJA}$				75				°C/W
Junction and storage temperature range	$T_J, T_{STG}$				-55 to 150				°C

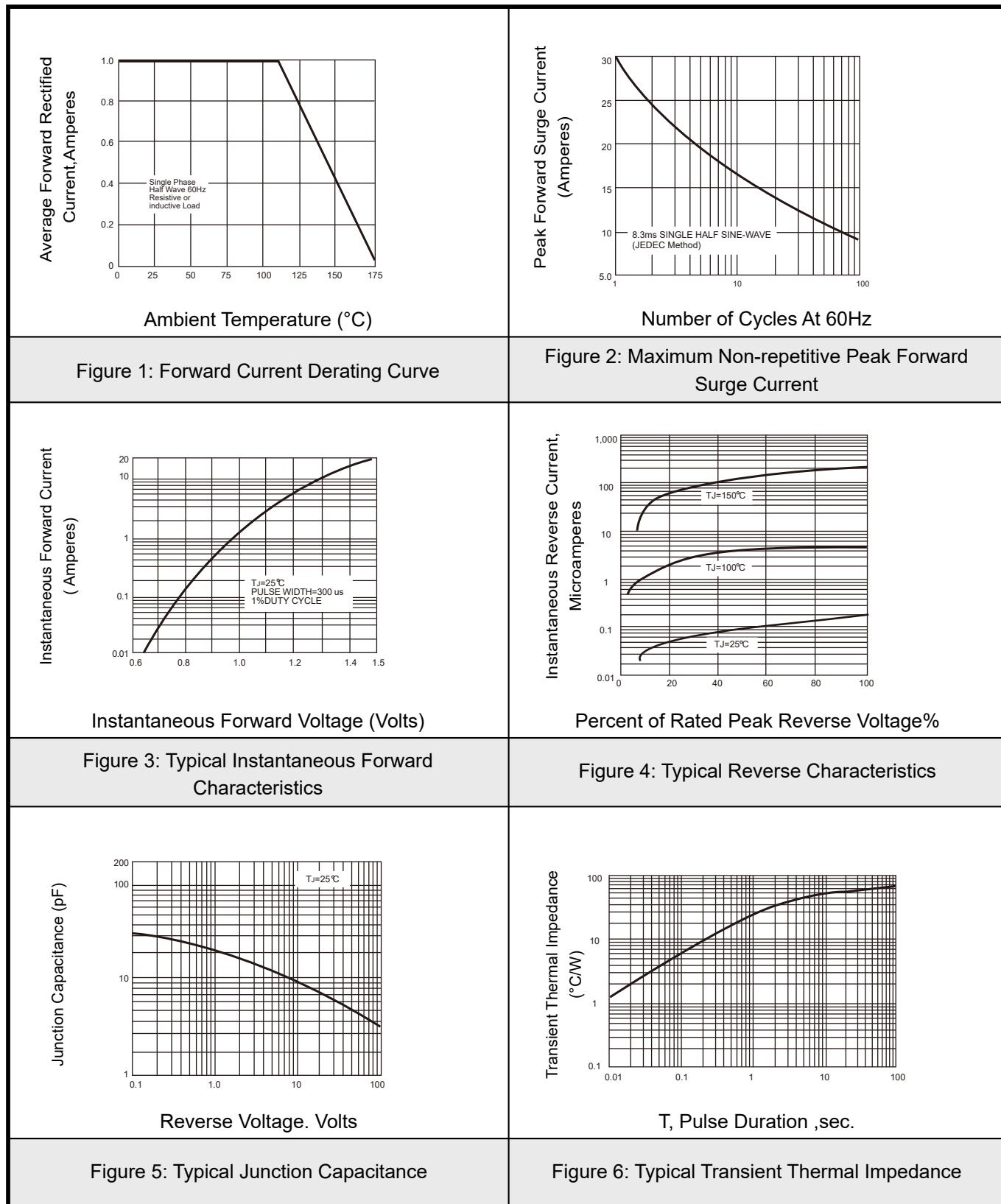
Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Notes:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas.

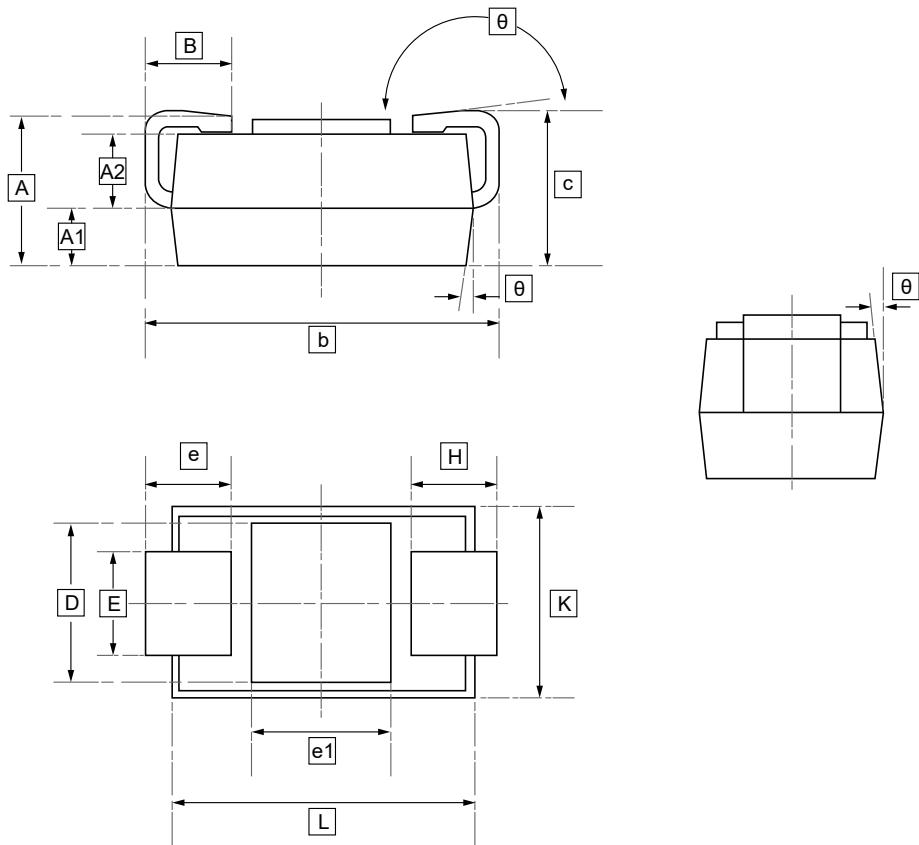


## 5.Typical characteristic





## 6.SMA Package Outline Dimensions



### DIMENSIONS (mm are the original dimensions)

Symbol	A	A1	A2	B	b	c	D	E	e1	L	K	θ
<b>Min</b>	1.95	0.77	0.97	1.10	4.95	2.00	2.09	1.38	1.95	4.25	2.60	0°
<b>Max</b>	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	Package	Base QTY	Delivery Mode
UMW 1N4007(M7)	SMA	2000	Tape and reel



## **8.Disclaimer**

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