



**FEATURES**

- Average Forward Current:  $I_{F(AV)}=1A$
- Polarity: Color band denotes cathode



SMA

**Package Marking and Ordering Information**

Product ID	Pack	Marking	Qty(PCS)
1N4004	SMA	M4	2000



\*:From 1-7

**MAXIMUM RATINGS (Ta=25 unless otherwise noted)**

Item	Symbol	Unit	Test Conditions	1N4004
Repetitive Peak Reverse Voltage	$V_{RRM}$	V		400
Maximum RMS Voltage	$V_{RMS}$	V		280
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, $T_L=75^{\circ}C$	1.0
Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	60Hz Half-sine wave, 1 cycle, $T_a=25^{\circ}C$	30
Operation Junction and Storage Temperature Range	$T_J, T_{STG}$	$^{\circ}C$		-55 ~ +150

**ELECTRICAL CHARACTERISTICS (T =25 unless otherwise specified)**

Item	Symbol	Unit	Test Condition	1N4004	
Peak Forward Voltage	$V_F$	V	$I_F=1.0A$	1.0	
Peak Reverse Current	$I_{RRM1}$	$\mu A$	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}C$	5
	$I_{RRM2}$			$T_a=125^{\circ}C$	50
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^{\circ}C/W$	Between junction and ambient	55	
	$R_{\theta J-L}$		Between junction and terminal	25	

**Notes:**

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas



## Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

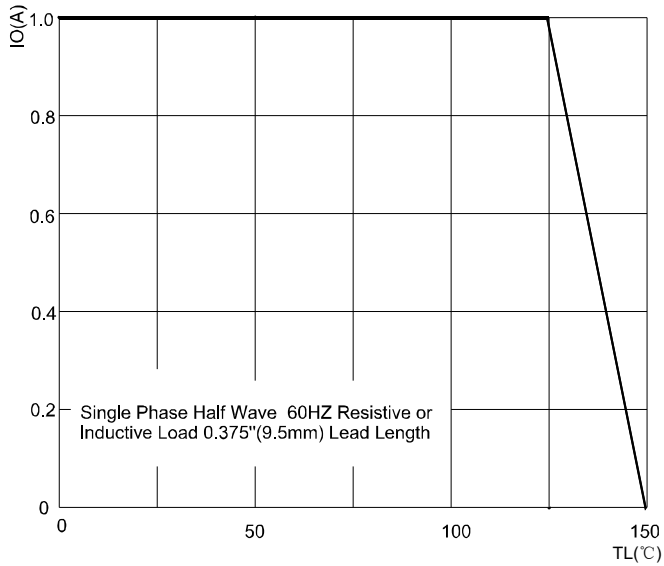


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

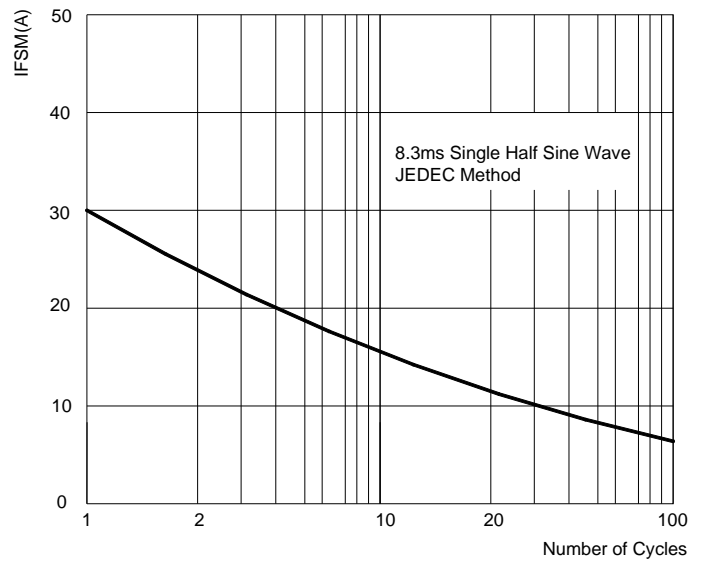


FIG.3: TYPICAL FORWARD CHARACTERISTICS

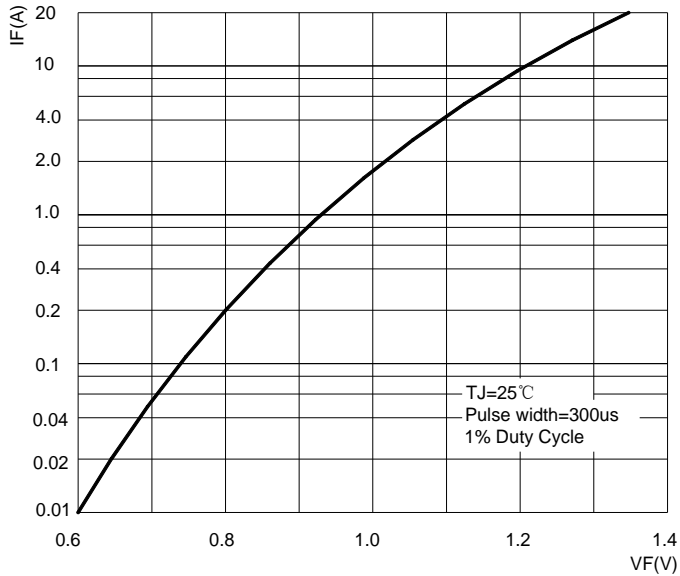
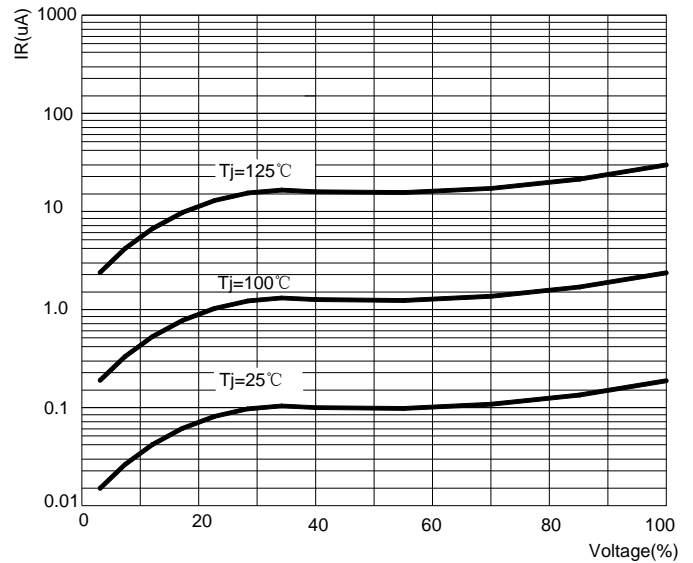
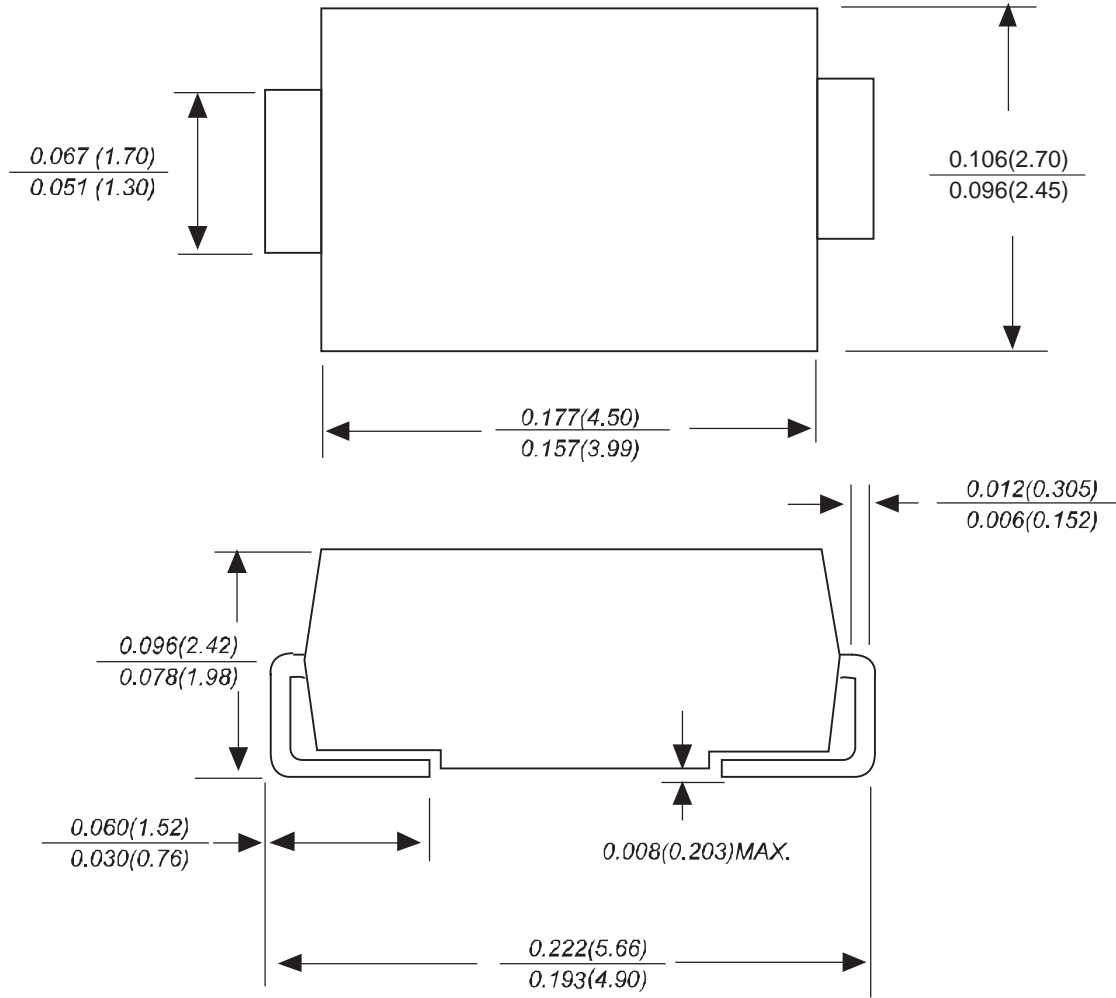


FIG.4: TYPICAL REVERSE CHARACTERISTICS





### SMA Package Outline Dimensions



*Dimensions in inches and (millimeters)*



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