



1N4001S THRU 1N4007S

硅整流二极管 General Purpose Rectifier

■特征 Features

- I_o 1.0A
- VRRM 50V-1000V
- 耐正向浪涌电流能力高
- High surge current capability

■用途 Applications

- 整流用 Rectifier

■极限值（绝对最大额定值）

Limiting Values (Absolute Maximum Rating)

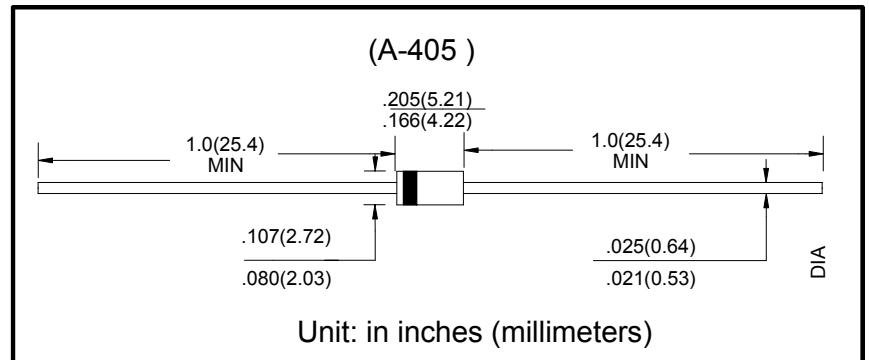
参数名称 Item	符号 Symbol	单位 Unit	条件 Conditions	1N40						
				01S	02S	03S	04S	05S	06S	07S
反向重复峰值电压 Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
正向平均电流 Average Forward Current	$I_{F(AV)}$	A	正弦半波 60Hz, 电阻负载, $T_a=50^\circ\text{C}$ 60Hz Half-sine wave, Resistance load, $T_a=50^\circ\text{C}$	1.0						
正向（不重复）浪涌电流 Surge(Non-repetitive)Forward Current	I_{FSM}	A	正弦半波 60Hz, 一个周期, $T_a=25^\circ\text{C}$ 60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$	30						
结温 Junction Temperature	T_J	$^\circ\text{C}$		-55~+125						
储存温度 Storage Temperature	T_{STG}	$^\circ\text{C}$		-55 ~ +150						

■电特性（ $T_a=25^\circ\text{C}$ 除非另有规定）

Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

参数名称 Item	符号 Symbol	单位 Unit	测试条件 Test Condition		最大值 Max
正向峰值电压 Peak Forward Voltage	V_{FM}	V	$I_{FM}=1.0A$		1.1
反向峰值电流 Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	$T_a=25^\circ\text{C}$	5
	I_{RRM2}			$T_a=125^\circ\text{C}$	50
热阻(典型) Thermal Resistance(Typical)	$R_{\theta J-A}$	$^\circ\text{C}/W$	结和环境之间 Between junction and ambient		60
	$R_{\theta J-L}$		结和引线之间 Between junction and lead		30

■外形尺寸和印记 Outline Dimensions and Mark



■特性曲线（典型） Characteristics(Typical)

图1: 正向电流降额曲线
FIG.1: FORWARD CURRENT DERATING CURVE

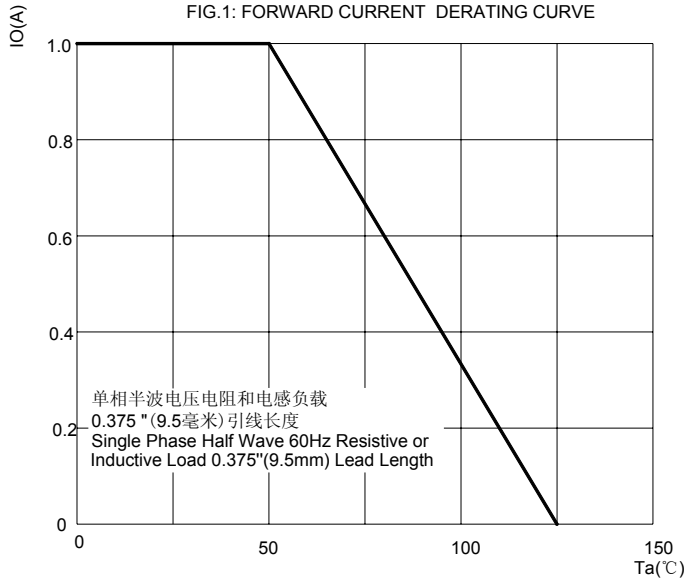


图2: 最大正向浪涌冲击耐受力
FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

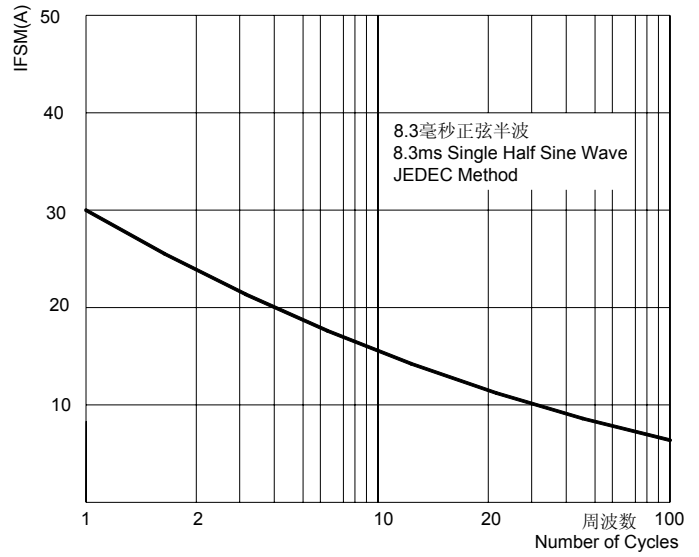


图3: 典型正向特性曲线
FIG.3: TYPICAL FORWARD CHARACTERISTICS

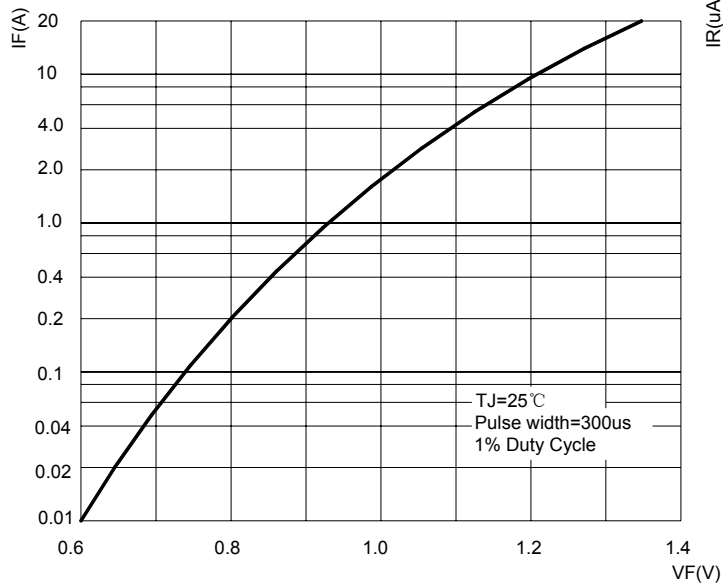


图4: 典型反向特性曲线
FIG.4: TYPICAL REVERSE CHARACTERISTICS

