



# ARS/AR25A SERIES

## 硅整流器 Silicon Rectifier

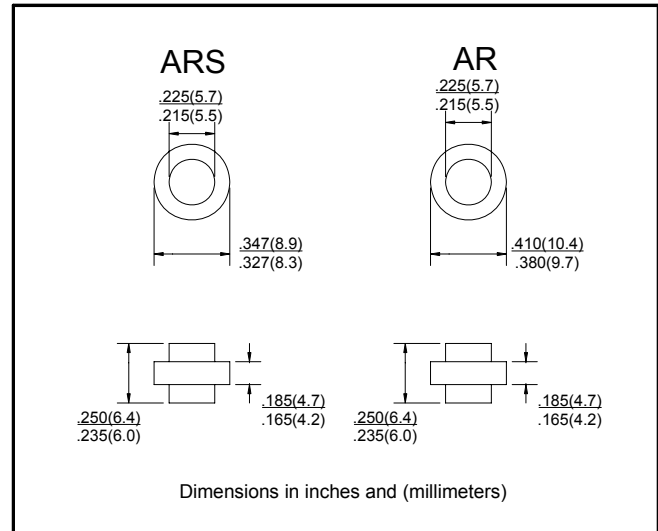
### ■特征 Features

- $I_o$  25A
- $V_{RRM}$  50V~1000V
- 使用环氧胶进行保护  
Plastic material used carries underwriters
- 耐正向浪涌电流能力高  
High surge forward current capability

### ■用途 Applications

- 作一般单相整流用  
General purpose 1 phase rectifier applications

### ■外形尺寸和印记 Outline Dimensions and Mark



### ■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	ARS/AR25A						
				005	01	02	04	06	08	10
反向重复峰值电压 Repetitive Peak Reverse Voltage	$V_{RRM}$	V		50	100	200	400	600	800	1000
平均整流输出电流 Average Rectified Output Current	$I_o$	A	60Hz 正弦波, 电阻负载, $T_c=150^\circ\text{C}$ 60Hz sine wave, R- load, $T_c=150^\circ\text{C}$	25						
正向（不重复）浪涌电流 Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	60Hz正弦波, 一个周期, $T_a=25^\circ\text{C}$ 60Hz sine wave, 1 cycle, $T_a=25^\circ\text{C}$	400						
正向浪涌电流的平方对电流浪涌持续时间的积分值 Current Squared Time	$I^2t$	$\text{A}^2\text{s}$	1ms $\leq t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$ , 单个二极管 1ms $\leq t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$ , Rating of per diode	660						
存储温度 Storage Temperature	$T_{stg}$	$^\circ\text{C}$		-55 ~ +175						
结温 Junction Temperature	$T_j$	$^\circ\text{C}$		-55 ~ +175						

### ■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	$I_{FM}=25\text{A}$ , 脉冲测试, 单个二极管的额定值 $I_{FM}=25\text{A}$ , Pulse measurement, Rating of per diode	1.1	
反向峰值电流 Peak Reverse Current	$I_{RRM1}$	$\mu\text{A}$	$V_{RM}=V_{RRM}$	$T_a=25^\circ\text{C}$	5
	$I_{RRM2}$			$T_a=125^\circ\text{C}$	500
热阻 Thermal Resistance	$R_{\theta J-C}$	$^\circ\text{C}/\text{W}$	结和外壳之间 Between junction and case	1.0	

## ■特性曲线（典型） Characteristics(Typical)

图1:  $I_o$ - $T_a$ 曲线  
FIG1: $I_o$ - $T_a$  Curve

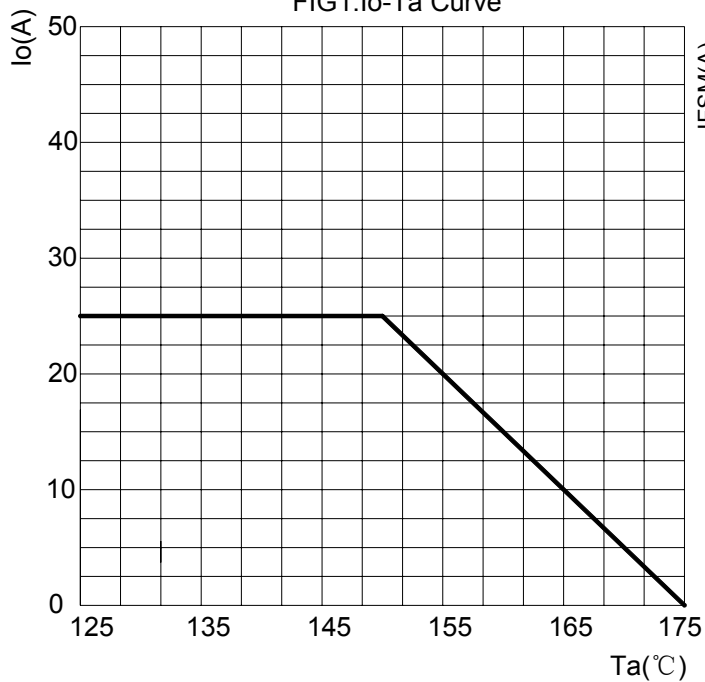


图2: 耐正向浪涌电流曲线  
FIG2: Surge Forward Current Capadility

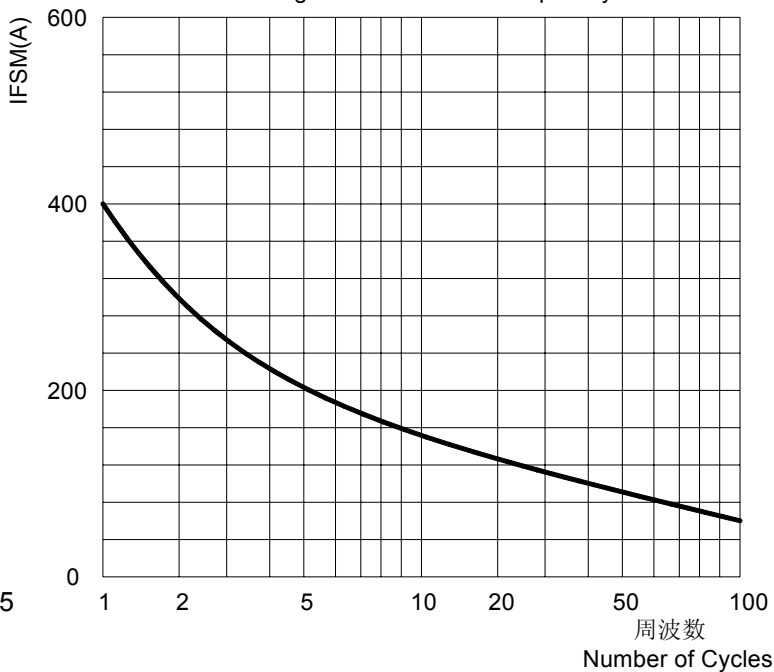


图3: 正向电压曲线  
FIG3: Instantaneous Forward Voltage

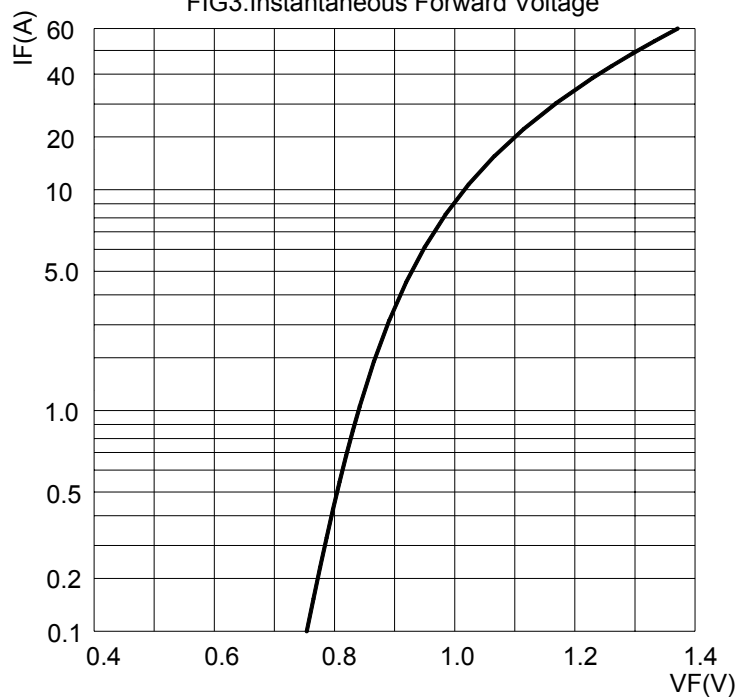


图4: 反向电流曲线  
FIG4: Typical Reverse Characteristics

