



# FR101G THRU FR107G

## 快恢复二极管 Fast Recovery 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

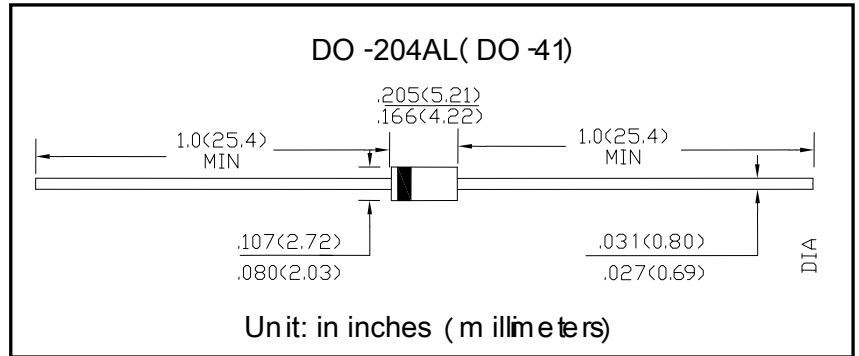
### ■用途 Applications

- 整流用 Rectifier

### ■极限值 (绝对最大额定值)

#### Limiting Values (Absolute Maximum Rating)

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



参数名称 Item	符号 Symbol	单位 Unit	条件 Conditions	FR10						
				1G	2G	3G	4G	5G	6G	7G
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, $T_a=75^\circ C$ 60Hz Half-sine wave, Resistance load, $T_a=75^\circ C$	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, $T_a=25^\circ C$ 60Hz Half-sine wave, 1 cycle, $T_a=25^\circ C$	30						
结温 Junction Temperature	$T_J$	$^\circ C$		-55~+150						
储存温度 Storage Temperature	$T_{STG}$	$^\circ C$		-55 ~ +150						

### ■电特性 (Ta=25°C 除非另有规定)

#### Electrical Characteristics (Ta=25°C Unless otherwise specified)

参数名称 Item	符号 Symbol	单位 Unit	条件 Conditions	FR10						
				1G	2G	3G	4G	5G	6G	7G
正向峰值电压 Peak Forward Voltage	$V_{FM}$	V	$I_{FM}=1.0A$	1.3						
反向峰值电流 Peak Reverse Current	$I_{RRM1}$	$\mu A$	$V_{RM}=V_{RRM}$	$T_a=25^\circ C$						
	$I_{RRM2}$			$T_a=125^\circ C$						
反向恢复时间 Reverse Recovery time	$t_r$	ns	$I_F=0.5A$ $I_R=1A$ $I_{RR}=0.25A$	150			250	500		
热阻(典型) Thermal Resistance(Typical)	$R_{\theta J-A}$	$^\circ C/W$	结和环境之间 Between junction and ambient	60						
结电容 Typical junction capacitance	$C_j$	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	20						

## ■特性曲线（典型） Characteristics(Typical)

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

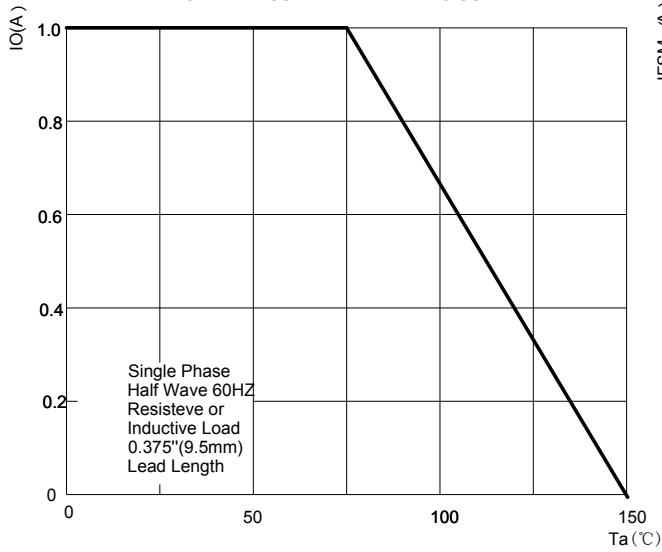


FIG.2 最大正向浪涌冲击耐受力  
MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

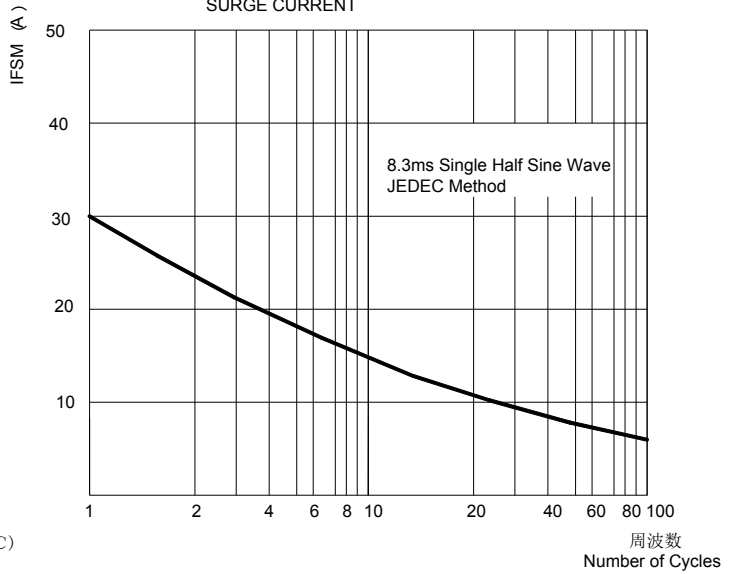


FIG.3 典型正向特性曲线  
TYPICAL FORWARD CHARACTERISTICS

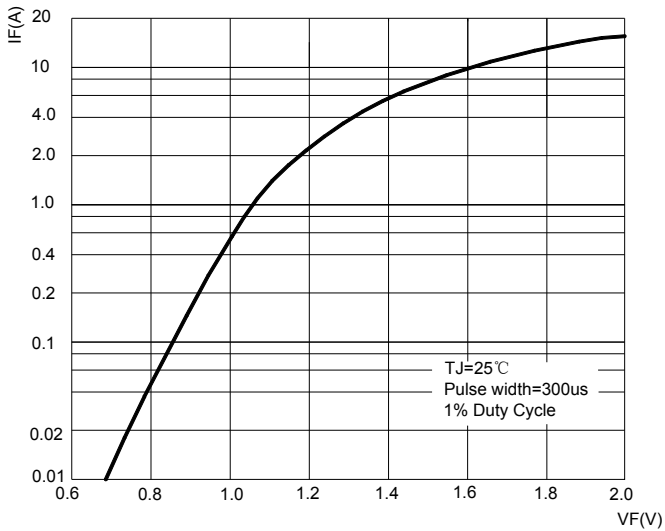


FIG.4 典型反向特性曲线  
TYPICAL REVERSE CHARACTERISTICS

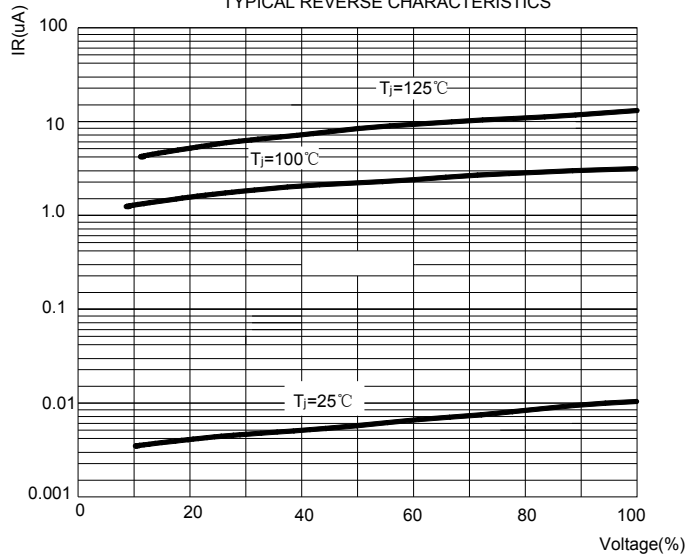


FIG.5 反向恢复时间试验电路及测试波形示意图  
Diagram of circuit and Testing wave form of reverse recovery time

