

## Super Fast Rectifier

### ■特征 Features

- $I_o$  5.0A
- VRRM 50V-600V
- 耐正向浪涌电流能力高
- High surge current capability

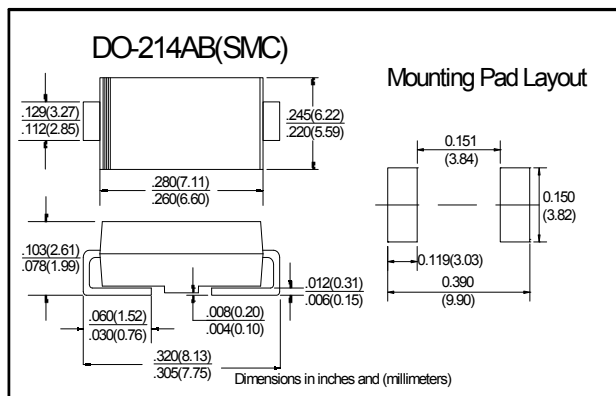
### ■用途 Applications

- 整流用 Rectifier

### ■极限值（绝对最大额定值）

#### Limiting Values (Absolute Maximum Rating)

### ■外形尺寸 Outline Dimensions



| 参数名称<br>Item                                        | 符号<br>Symbol | 单位<br>Unit       | 条件<br>Conditions                                                                                        | ES5        |     |     |     |     |     |     |     |
|-----------------------------------------------------|--------------|------------------|---------------------------------------------------------------------------------------------------------|------------|-----|-----|-----|-----|-----|-----|-----|
|                                                     |              |                  |                                                                                                         | A          | B   | C   | D   | F   | G   | H   | J   |
| 反向重复峰值电压<br>Repetitive Peak Reverse Voltage         | $V_{RRM}$    | V                |                                                                                                         | 50         | 100 | 150 | 200 | 300 | 400 | 500 | 600 |
| 正向平均电流<br>Average Forward Current                   | $I_{F(AV)}$  | A                | 正弦半波 60Hz, 电阻负载, $T_a=50^\circ\text{C}$<br>60Hz Half-sine wave, Resistance load, $T_a=50^\circ\text{C}$ | 5.0        |     |     |     |     |     |     |     |
| 正向（不重复）浪涌电流<br>Surge(Non-repetitive)Forward Current | $I_{FSM}$    | A                | 正弦半波 60Hz, 一个周期, $T_a=25^\circ\text{C}$<br>60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$         | 150        |     |     |     |     |     |     |     |
| 结温<br>Junction Temperature                          | $T_J$        | $^\circ\text{C}$ |                                                                                                         | -55~+150   |     |     |     |     |     |     |     |
| 储存温度<br>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<br>Item                             | 符号<br>Symbol         | 单位<br>Unit | 测试条件<br>Test Condition                                            |                     | ES5  |   |   |   |     |   |     |   |
|------------------------------------------|----------------------|------------|-------------------------------------------------------------------|---------------------|------|---|---|---|-----|---|-----|---|
|                                          |                      |            |                                                                   |                     | A    | B | C | D | F   | G | H   | J |
| 正向峰值电压<br>Peak Forward Voltage           | V <sub>FM</sub>      | V          | I <sub>FM</sub> =5.0A                                             |                     | 0.95 |   |   |   | 1.3 |   | 1.7 |   |
| 反向峰值电流<br>Peak Reverse Current           | I <sub>RRM1</sub>    | μA         | V <sub>RM</sub> =V <sub>RRM</sub>                                 | T <sub>a</sub> =25℃ | 10   |   |   |   |     |   |     |   |
|                                          | T <sub>a</sub> =125℃ |            |                                                                   | 500                 |      |   |   |   |     |   |     |   |
| 反向恢复时间<br>Reverse Recovery time          | t <sub>r</sub>       | ns         | I <sub>F</sub> =0.5A I <sub>R</sub> =1A<br>I <sub>RR</sub> =0.25A |                     | 35   |   |   |   |     |   |     |   |
| 热阻(典型)<br>Thermal<br>Resistance(Typical) | R <sub>θJ-A</sub>    | ℃/<br>W    | 结和环境之间<br>Between junction and ambient                            |                     | 50   |   |   |   |     |   |     |   |
|                                          | R <sub>θJ-L</sub>    |            | 结和引线之间<br>Between junction and lead                               |                     | 15   |   |   |   |     |   |     |   |

### 备注: Notes:

<sup>1)</sup> 热阻从结到环境及从结到引线，在电路板的0.3" x 0.3" (8.0毫米 x 8.0毫米)铜垫片区

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper pad areas

■特性曲线（典型） Characteristics(Typical)

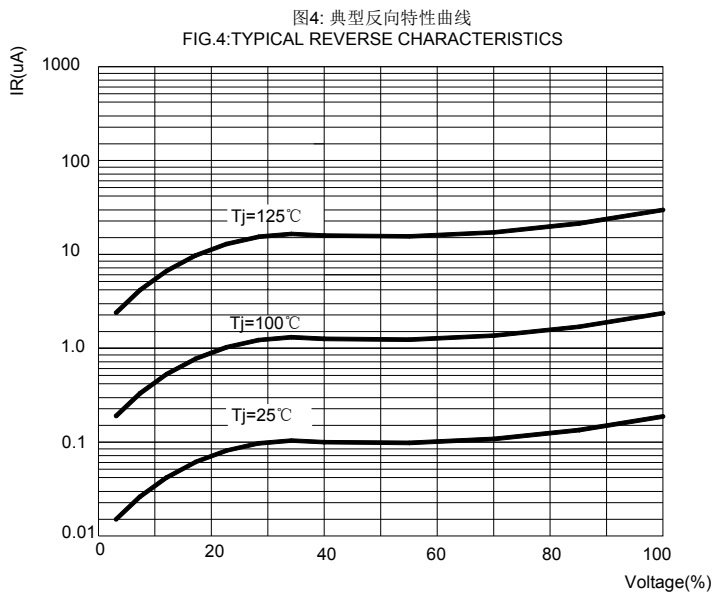
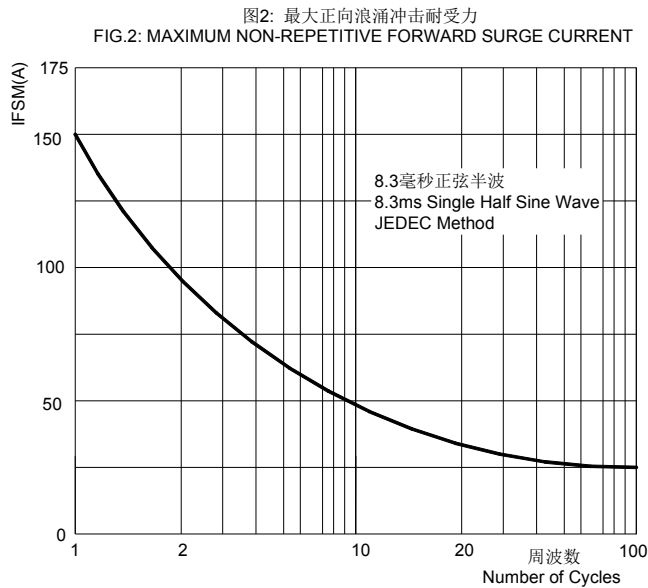
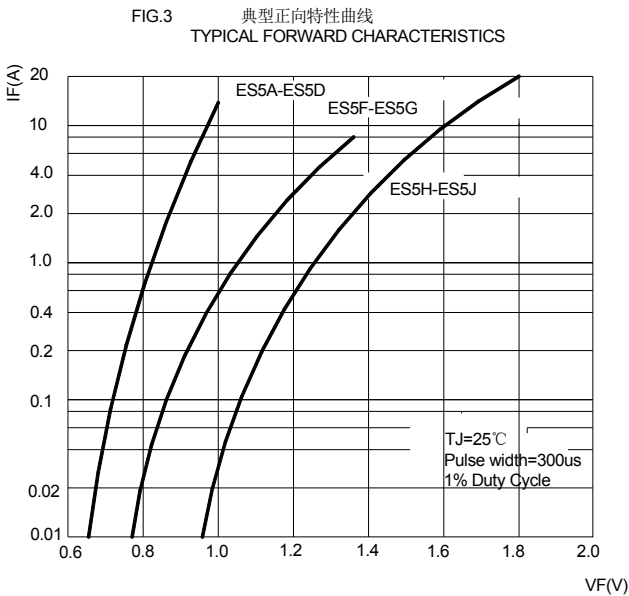
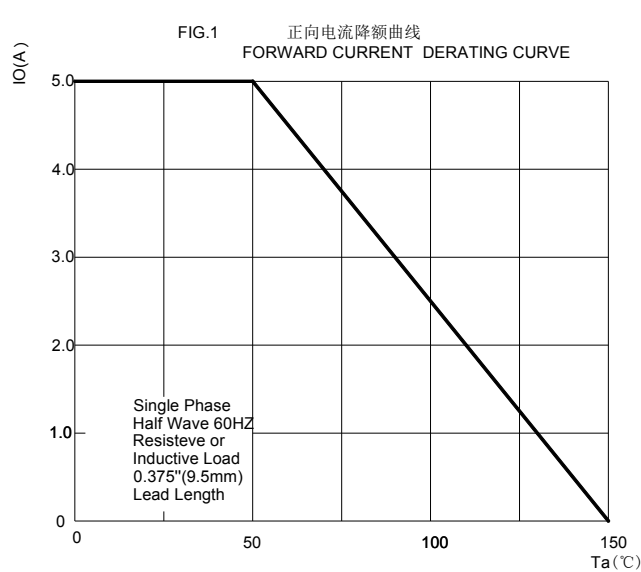


图5: 反向恢复时间试验电路及测试波形示意图  
FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

