

## 塑封外延快恢复整流二极管

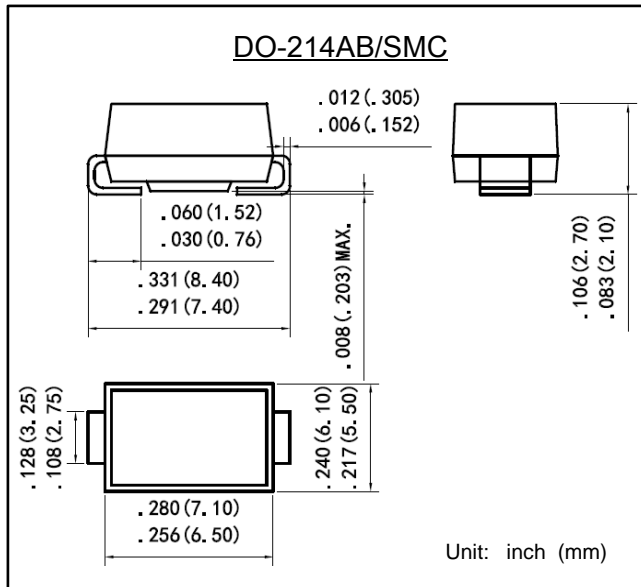
反向电压 50 ~ 600 V

正向电流 3.0 A

## Plastic Epitaxial Fast Recovery Rectifiers

Reverse Voltage 50 ~ 600 V

Forward Current 3.0 A



### 特征 Features

- 反向漏电流低 Low reverse leakage
- 正向浪涌承受能力强 High forward surge capability
- 高信赖性 High reliability
- 高温焊接保证 High temperature soldering guaranteed:
  - 260°C/10 秒
  - 260°C/10seconds
- 引线 and 管体皆符合RoHS标准
  - Lead and body according with RoHS standard
- 型号后缀“-F”标记无卤素产品
  - Green compound with suffix "-F" on Marking

### 机械数据 Mechanical Data

- 封装外形:DO-214AB 塑封 Case:DO-214AB Molded plastic
- 环氧树脂:UL易燃等级:94V-0
  - Epoxy:UL 94V-0 rate flame retardant
- 引脚:镀锡,无铅 Lead:Pure tin plated, lead free

### 最大值和特性 TA = 25°C 除非另有规定。

### Maximum Ratings & Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

| 参数<br>Parameter  | 符号<br>Symbols   | MURS<br>305  | MURS<br>310 | MURS<br>320 | MURS<br>340 | MURS<br>360 | 单位<br>Unit |
|--|-----------------|--------------|-------------|-------------|-------------|-------------|------------|
| 最大可重复峰值反向电压<br>Maximum repetitive peak reverse voltage   | $V_{RRM}$       | 50           | 100         | 200         | 400         | 600         | V          |
| 最大均方根电压<br>Maximum RMS voltage   | $V_{RMS}$       | 35           | 70          | 140         | 280         | 420         | V          |
| 最大直流阻断电压<br>Maximum DC blocking voltage  | $V_{DC}$        | 50           | 100         | 200         | 400         | 600         | V          |
| 最大正向平均整流电流<br>Maximum average forward rectified current  | $I_{F(AV)}$     | 3.0          |             |             |             |             | A          |
| 正向不重复浪涌电流 8.3 ms单一正弦半波<br>Non-repetitive peak forward surge current<br>8.3 ms singlehalf sine-wave | $I_{FSM}$       | 80           |             |             |             |             | A          |
| 最大正向电压 @IF=3.0A<br>Maximum forward voltage   | $V_F$           | 0.875        |             |             | 1.25        |             | V          |
| 最大反向电流 @V <sub>DC</sub><br>Maximum reverse current   | $I_R$           | 5            |             |             |             |             | μA         |
| TA= 25°C   |                 | 100          |             |             |             |             |            |
| 最大反向恢复时间 IF=0.5A, IR=1.0A, IRR=0.25A<br>MAX. reverse recovery time                                 | $T_{RR}$        | 25           |             |             | 50          |             | nS         |
| 典型热阻<br>Typical thermal resistance (Note 1)  | $R_{\theta JA}$ | 65           |             |             |             |             | °C/W       |
| 典型结电容 VR=4.0V, f=1MHz<br>Type junction capacitance   | $C_J$           | 160          |             |             | 130         |             | pF         |
| 工作结温和存储温度<br>Operating junction and storage temperature rang                                       | $T_J, T_{STG}$  | -55 --- +150 |             |             |             |             | °C         |

备注 Note:

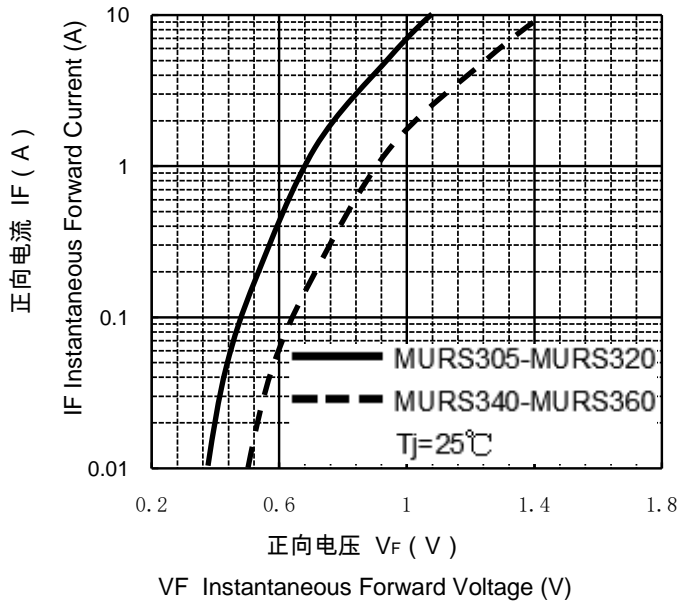
1) 引线长度 0.375" (9.5 mm), 安装在PCB板上, 从PN结到周围环境的热阻。

1) Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, PCB mounted.

## 特性曲线 Characteristic Curves

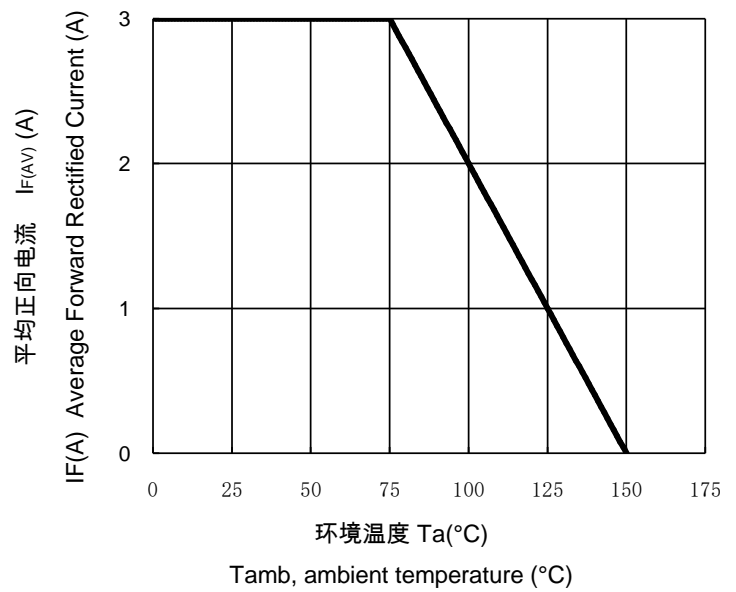
正向特性曲线 (典型值)

TYPICAL FORWARD CHARACTERISTIC



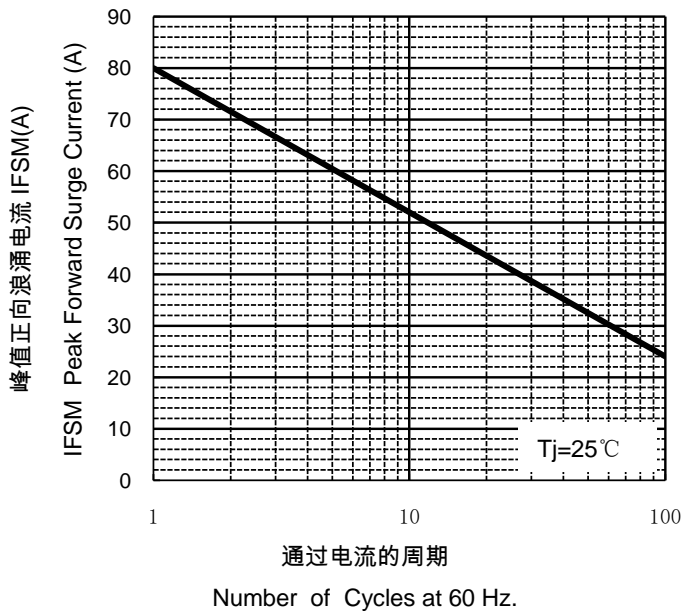
正向电流降额曲线

FORWARD CURRENT DERATING CURVE



浪涌特性曲线 (最大值)

MAXIMUM NON REPETITIVE  
PEAK FORWARD SURGE CURRENT



反向特性曲线

Typical Reverse Characteristics

