SIYU®

# BA157 ..... BA159

## 塑封快恢复整流二极管

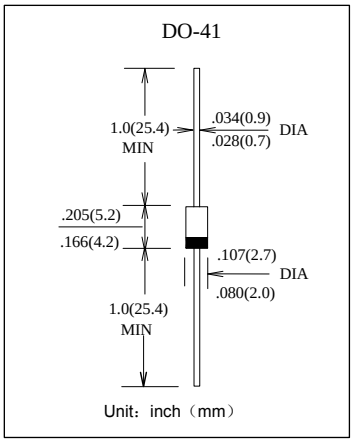
反向电压 400 ---1000 V

正向电流 1.0 A

## Plastic Fast Recover Rectifier

Reverse Voltage 400 to 1000V

Forward Current 1.0A




## 特征 Features

- 反向漏电流低 Low reverse leakage
- 正向浪涌承受能力较强 High forward surge capability
- 高温焊接保证 High temperature soldering guaranteed:
  260℃/10 秒, 0.375" (9.5mm)引线长度。
  260℃/10 seconds, 0.375" (9.5mm) lead length,
- 引线可承受5 磅 (2.3kg) 拉力。 5 lbs. (2.3kg) tension
- 引线和管体皆符合RoHS标准 。
  Lead and body according with RoHS standard

## 机械数据 Mechanical Data

- 端子: 镀锡轴向引线 Terminals: Plated axial leads
- 极性: 色环端为负极 Polarity: Color band denotes cathode end
- 安装位置: 任意 Mounting Position: Any

### 极限值和温度特性 TA = 25℃ 除非另有规定。

### Maximum Ratings & Thermal Characteristics Ratings at 25℃ ambient temperature unless otherwise specified.

| | 符号 Symbols | BA157 | BA158 | BA159D | BA159 | 单位 Unit |
|---|---|---|---|---|---|---|
| 最大可重复峰值反向电压 Maximum repetitive peak reverse voltage | $V_{RRM}$ | 400 | 600 | 800 | 1000 | V |
| 最大均方根电压 Maximum RMS voltage | $V_{RMS}$ | 280 | 420 | 560 | 700 | V |
| 最大直流阻断电压 Maximum DC blocking voltage | $V_{DC}$ | 400 | 600 | 800 | 1000 | V |
| 最大正向平均整流电流 Maximum average forward rectified current | $I_{F(AV)}$ | 1.0 | | | | A |
| 峰值正向浪涌电流 8.3ms单一正弦半波 Peak forward surge current 8.3 ms single half sine-wave | $I_{FSM}$ | 20 | | | | A |
| 典型热阻 Typical thermal resistance | $R_{\theta JA}$ | 65 | | | | ℃/W |
| 工作结温和存储温度 Operating junction and storage temperature range | Tj, TSTG | -55 ---+150 | | | | ℃ |

### 电特性 TA = 25℃ 除非另有规定。

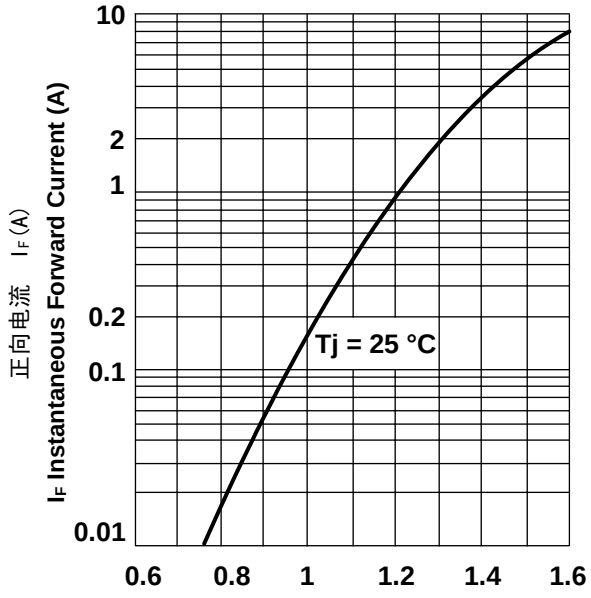
### Electrical Characteristics Ratings at 25℃ ambient temperature unless otherwise specified.

| | | 符号 Symbols | BA157 | BA158 | BA159D | BA159 | 单位 Unit |
|---|---|---|---|---|---|---|---|
| 最大正向电压 Maximum forward voltage | $I_F$ = 1.0A | $V_F$ | 1.3 | | | | V |
| 最大反向电流 Maximum reverse current | TA= 25℃<br>TA=100℃ | $I_R$ | 5.0<br>100 | | | | μA |
| 最大反向恢复时间 MAX. Reverse Recovery Time | $I_F$=0.5A $I_R$=1.0A $I_{RR}$=0.25A | trr | 150 | | 200 | 300 | nS |
| 典型结电容 Type junction capacitance | $V_R$ = 4.0V, f = 1MHz | $C_j$ | 15 | | | | pF |

## 特性曲线 Characteristic Curves

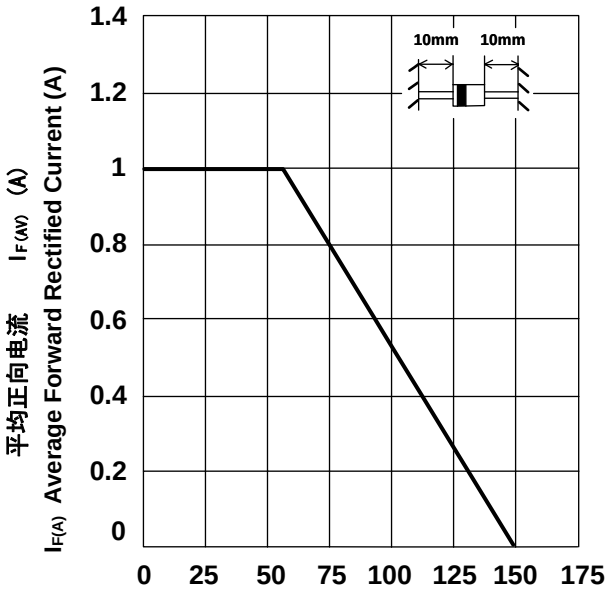
正向特性曲线（典型值）

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

