

## F8U120C

### 主要参数 MAIN CHARACTERISTICS

|               |        |
|---------------|--------|
| $I_{F(AV)}$   | 8A     |
| $V_{RRM}$     | 1200 V |
| $T_j$         | 150 °C |
| $V_F$ (TYP)   | 2.2V   |
| $T_{RR}(TYP)$ | 35ns   |

### 用途

- 开关电源
- 通用电路
- 不间断电源

### APPLICATIONS

- Switch power supply
- General circuits
- UPS

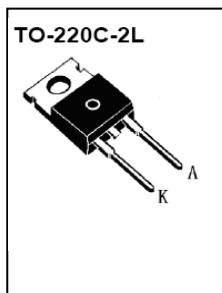
### 产品特性

- 低功耗, 高效率
- 高可靠性
- 环保 (RoHS) 产品

### FEATURES

- Low power loss, high efficiency
- High reliability
- RoHS product

### 封装 Package



**绝对最大额定值 ABSOLUTE RATINGS** ( $T_c=25^{\circ}\text{C}$ )

| 项 目<br>Parameter                                                                                                             | 符 号<br>Symbol | 数 值<br>Value | 单 位<br>Unit        |
|------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|--------------------|
| 最大反向重复峰值电压<br>Repetitive peak reverse voltage                                                                                | $V_{RRM}$     | 1200         | V                  |
| 正向平均整流电流<br>Average forward current                                                                                          | $I_{F(AV)}$   | 8            | A                  |
| 正向峰值浪涌电流<br>Surge non repetitive forward current<br>(额定负载 8.3ms 半正弦波—按 JEDEC 方法) 8.3 ms single half-sine-wave (JEDEC Method) | $I_{FSM}$     | 90           | A                  |
| 最高结温<br>Maximum junction temperature                                                                                         | $T_j$         | 150          | $^{\circ}\text{C}$ |
| 储存温度<br>Storage temperature range                                                                                            | $T_{STG}$     | -50~+150     | $^{\circ}\text{C}$ |

**电特性 ELECTRICAL CHARACTERISTICS**

| 项 目<br>Parameter | 测试条件<br>Tests conditions     |         | 最小值<br>Value(min) | 典型值<br>Value(typ) | 最大值<br>Value(max) | 单位<br>Unit |
|------------------|------------------------------|---------|-------------------|-------------------|-------------------|------------|
| VRRM             | I=50μA                       |         | 1200              | -                 | -                 | V          |
| IR               | Tj =25℃                      | VR=VRRM | -                 | -                 | 50                | μA         |
|                  | Tj =125℃                     |         | -                 | -                 | 200               | uA         |
| VF               | Tj =25℃                      | IF=8A   | -                 | -                 | 3.2               | V          |
|                  | Tj =125℃                     |         | -                 | -                 | 2.8               | V          |
| Trr              | IF=1A,VR=30V,diF/dt=200A/μs  |         | -                 | 35                | 50                | nS         |
| Trr              | IF=8A,VR=840V,diF/dt=600A/μs |         | -                 | 45.2              | -                 | ns         |
| Irr              |                              |         | -                 | 11.72             | -                 | A          |

**热特性 Thermal Characteristics**

| 项 目<br>Parameter                                | 符 号<br>Symbol | 最大<br>Max | 单 位<br>Unit                 |
|-------------------------------------------------|---------------|-----------|-----------------------------|
| 结到管壳的热阻<br>Thermal Resistance, Junction to Case | $R_{th(j-c)}$ | 2.2       | $^{\circ}\text{C}/\text{W}$ |

## 特征曲线 ELECTRICAL CHARACTERISTICS (curves)

Fig.1 Typical forward characteristics

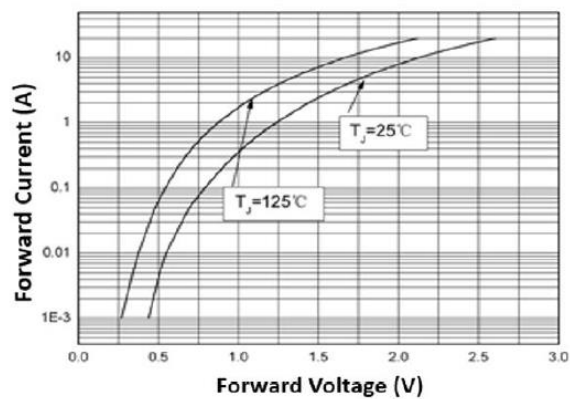
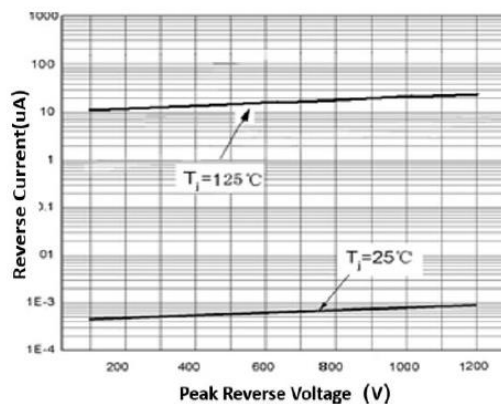
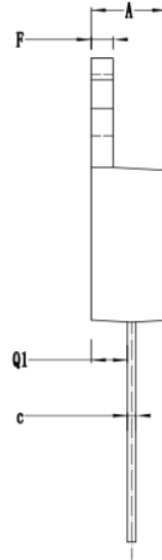
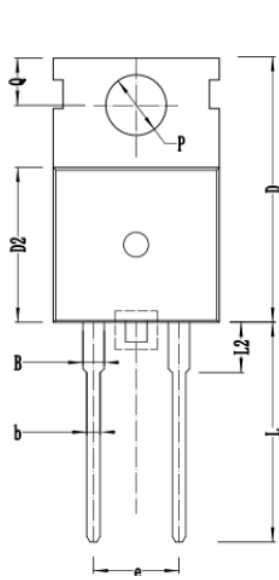


Fig.2 Typical reverse characteristics



## 外形尺寸 PACKAGE MECHANICAL DATA

## TO-220C-2L



单位 Unit : mm

| 符号<br>symbol | 单位: mm |       |
|--------------|--------|-------|
|              | MIN    | MAX   |
| A            | 4.30   | 4.70  |
| B            | 1.22   | 1.40  |
| b            | 0.70   | 0.95  |
| c            | 0.40   | 0.65  |
| D            | 15.20  | 16.20 |
| D2           | 9.00   | 9.40  |
| E            | 9.70   | 10.10 |
| e            | 4.78   | 5.38  |
| F            | 1.25   | 1.40  |
| L            | 12.60  | 13.60 |
| L2           | 2.80   | 3.20  |
| ΦP           | 3.50   | 3.80  |
| Q            | 2.60   | 3.00  |
| Q1           | 2.20   | 2.60  |