

## SOT-363 ESD 静电保护二极管

### ■ Features 特点

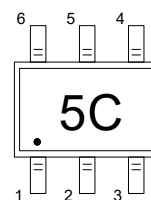
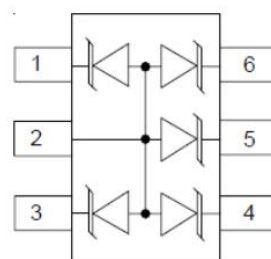
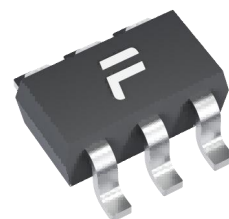
Five Un-directional Lines 五通道单向  
ESD Protection 静电保护

### ■ Applications 应用

Cellular handsets and accessories 蜂窝手机及配件  
Personal Digital Assistants 个人数码助手  
Notebooks & Handhelds 笔记本与手持机  
Portable Instrumentation 便携仪器仪表

### ■ Internal Schematic Diagram 内部结构

### ■ Device Marking 产品打标



### ■ Absolute Maximum Ratings 最大额定值

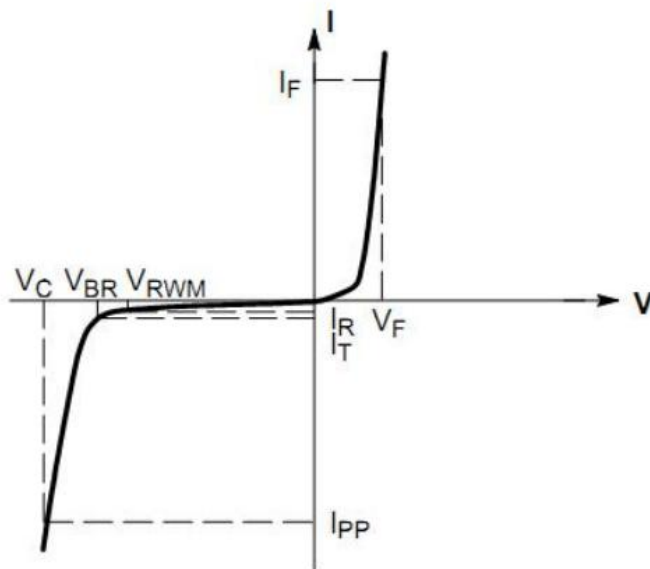
| Characteristic 特性参数                               | Symbol 符号 | Rat 额定值  | Unit 单位 |
|---------------------------------------------------|-----------|----------|---------|
| ESD (IEC61000-4-2 contact discharge)<br>@25°C接触放电 | $V_{ESD}$ | $\pm 20$ | KV      |
| ESD (IEC61000-4-2 air discharge)<br>@25°C空气放电     | $V_{ESD}$ | $\pm 20$ | KV      |
| Peak Pulse Power @25°C峰值脉冲功率                      | $P_{PK}$  | 100      | W       |
| Peak Pulse Current @25°C峰值脉冲电流                    | $I_{PP}$  | 6        | A       |
| Lead Temperature 管脚温度                             | $T_L$     | 260      | °C      |
| Lead Solder Time 管脚焊接时间                           | $T_L$     | 10       | S       |
| Operating Temperature 工作温度                        | $T_{op}$  | -40~85   | °C      |
| Junction Temperature 结温                           | $T_J$     | -55~125  | °C      |
| Storage Temperature 储存温度                          | $T_{stg}$ | -55~150  | °C      |

## ■ Electrical Characteristics 电特性

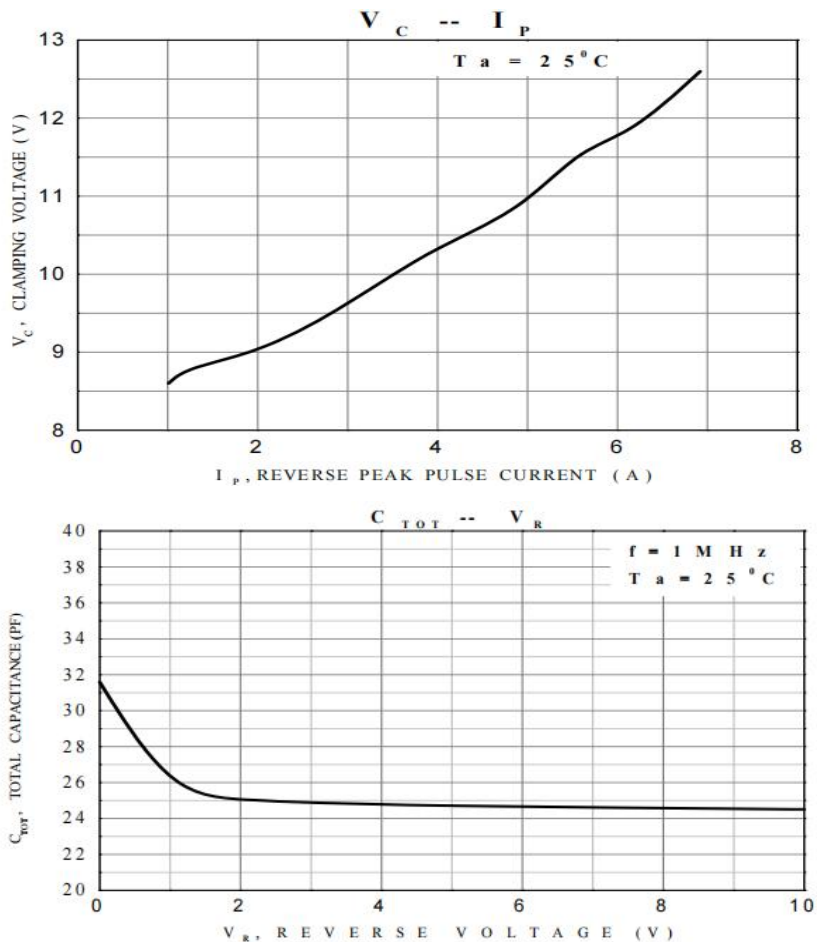
( $T_A=25^{\circ}\text{C}$  unless otherwise noted 如无特殊说明, 温度为  $25^{\circ}\text{C}$ )

| Characteristic Parameters<br>特性参数   | Symbol<br>符号     | Min<br>最小值 | Typ<br>典型值 | Max<br>最大值 | Unit<br>单位    | Condition<br>条件                                               |
|-------------------------------------|------------------|------------|------------|------------|---------------|---------------------------------------------------------------|
| Reverse Stand-off Voltage<br>反向工作电压 | $V_{\text{RWM}}$ |            |            | 5          | V             |                                                               |
| Reverse Breakdown Voltage<br>反向击穿电压 | $V_{\text{BR}}$  | 6          |            | 8          | V             | $I_{\text{T}}=1\text{mA}$                                     |
| Reverse Leakage Current<br>反向漏电流    | $I_{\text{R}}$   |            |            | 5          | $\mu\text{A}$ | $V_{\text{RWM}}=5\text{V}$                                    |
| Clamping Voltage<br>钳位电压            | $V_{\text{C}}$   |            | 10         |            | V             | $I_{\text{PP}}=1\text{A}$ ,<br>$t_{\text{p}}=8/20\mu\text{s}$ |
| Clamping Voltage<br>钳位电压            | $V_{\text{C}}$   |            | 18         |            | V             | $I_{\text{PP}}=6\text{A}$ ,<br>$t_{\text{p}}=8/20\mu\text{s}$ |
| Junction Capacitance<br>结电容         | $C_{\text{J}}$   |            | 50         |            | pF            | $V_{\text{R}}=0\text{V}$ ,<br>$f=1\text{MHz}$                 |

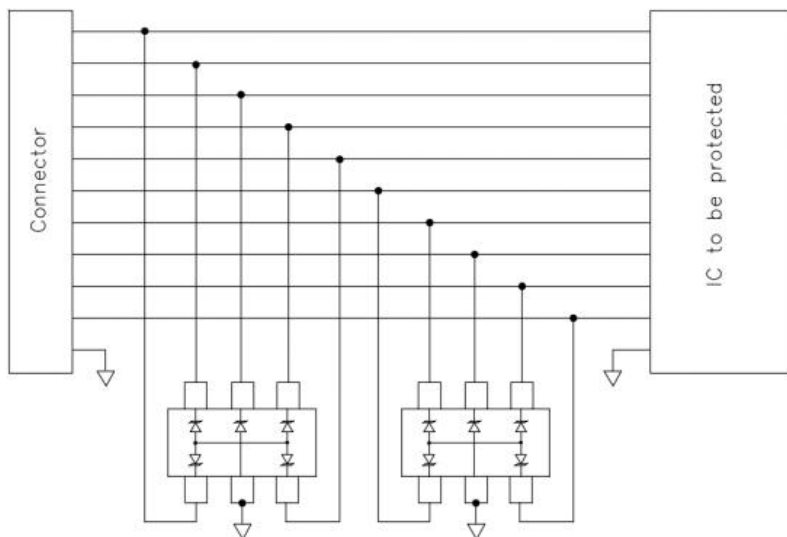
|                    |                                                                                                        |
|--------------------|--------------------------------------------------------------------------------------------------------|
| $V_{\text{RWM}}$   | Reverse Working Voltage<br>反向工作电压                                                                      |
| $V_{\text{R(BR)}}$ | Reverse Breakdown Voltage<br>反向击穿电压@ $I_{\text{T}}=1\text{mA}$                                         |
| $I_{\text{T}}$     | Test Current<br>测试电流                                                                                   |
| $I_{\text{R}}$     | Reverse Leakage Current<br>反向漏电流@ $V_{\text{RWM}}$                                                     |
| $V_{\text{C}}$     | Clamping Voltage<br>钳位电压                                                                               |
| $I_{\text{PP}}$    | Reverse Peak Pulse Current<br>浪涌电流                                                                     |
| $C_{\text{J}}$     | Junction Capacitance 结电容<br>$V_{\text{IO}}=0\text{V}$ , $V_{\text{P-P}}=30\text{mV}$ , $f=1\text{MHz}$ |



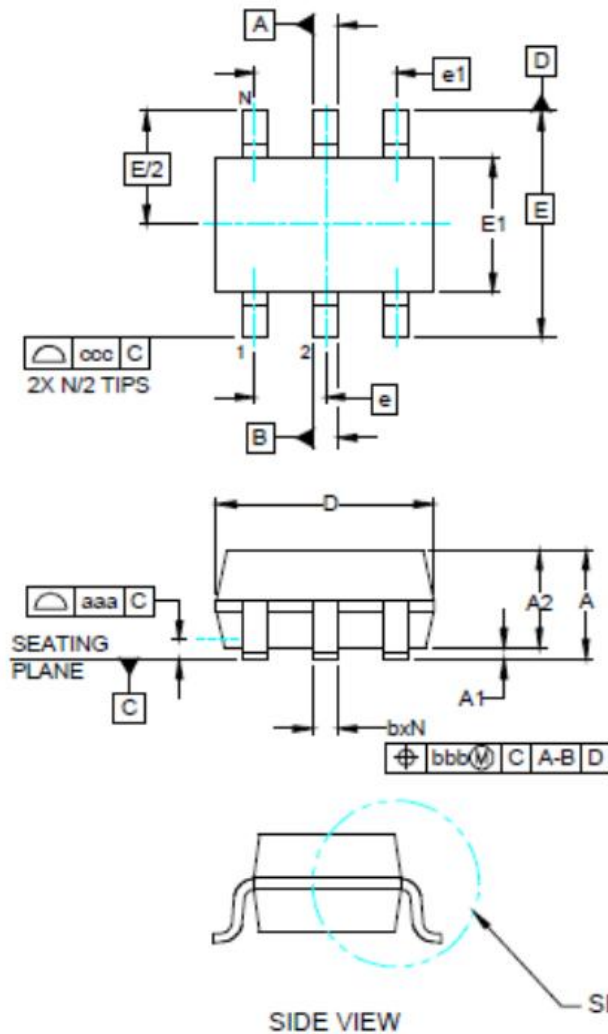
■ Typical Characteristic Curve 典型特性曲线



■ Typical Application 典型应用



■ Dimension 外形封装尺寸



| DIM        | INCHES   |      |      | MILLIMETERS |      |      |
|------------|----------|------|------|-------------|------|------|
|            | MIN      | NOM  | MAX  | MIN         | NOM  | MAX  |
| A          | -        | -    | .043 | -           | -    | 1.10 |
| A1         | .000     | -    | .004 | 0.00        | -    | 0.10 |
| A2         | .028     | .035 | .039 | 0.70        | 0.90 | 1.00 |
| b          | .008     | -    | .012 | 0.15        | -    | 0.30 |
| c          | .003     | -    | .009 | 0.08        | -    | 0.22 |
| D          | .071     | .079 | .087 | 1.80        | 2.00 | 2.20 |
| E1         | .045     | .049 | .053 | 1.15        | 1.25 | 1.35 |
| E          | .083 BSC |      |      | 2.10 BSC    |      |      |
| e          | .026 BSC |      |      | 0.65 BSC    |      |      |
| e1         | .051     |      |      | 1.30 BSC    |      |      |
| L          | .010     | .014 | .018 | 0.26        | 0.36 | 0.46 |
| L1         | (.017)   |      |      | (0.42)      |      |      |
| N          | 6        |      |      | 6           |      |      |
| $\theta 1$ | 0°       | -    | 8°   | 0°          | -    | 8°   |
| aaa        | .004     |      |      | 0.10        |      |      |
| bbb        | .004     |      |      | 0.10        |      |      |
| ccc        | .012     |      |      | 0.30        |      |      |