

用途: 用于高频率转换器, 开关电源, 续流二极管, OR-ing 二极管, DC-DC 转换器和电池反向保护。

Purpose: For use in high frequency converters, switching power supplies, freewheeling diodes, OR-ing diode, dc-to-dc converters and reverse battery protection.

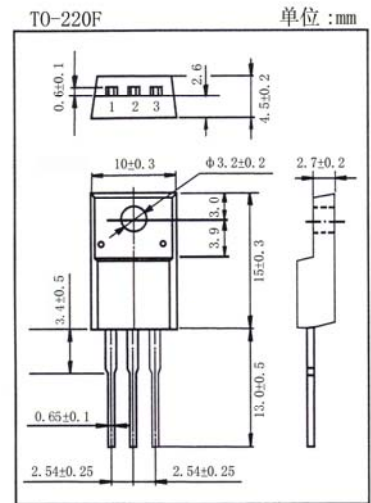
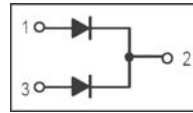
特点: 低正向压降, 低功耗损失, 高效率操作, 低热阻。

Features: Low forward voltage drop, low power losses, High efficiency operation, Low thermal resistance.

极限参数/Absolute maximum ratings per leg ( $T_a=25^\circ\text{C}$ )

| 参数符号<br>Symbol     | 数值<br>Rating   | 单位<br>Unit                |
|--------------------|----------------|---------------------------|
| $V_{RRM}$          | 100            | V                         |
| $I_{RRM}$          | 1.0            | A                         |
| $I_{F(AV)}$        | $2 \times 15$  | A                         |
| $V_F$ at $I_F=15A$ | 0.63           | V                         |
| $I_{FSM}$          | 160            | A                         |
| $R_{\theta Jc}$    | 5.5            | $^\circ\text{C}/\text{W}$ |
| $dV/dt$            | 10000          | $\text{V}/\mu\text{s}$    |
| $T_{j\max}$        | 150            | $^\circ\text{C}$          |
| $T_{stg}$          | $-40 \sim 150$ | $^\circ\text{C}$          |

等效电路



引脚: 1 2 3

电性能参数/Electrical characteristics per leg ( $T_a=25^\circ\text{C}$ )

| 参数符号<br>Symbol | 测试条件<br>Test condition                        | 数值<br>Rating |            |            | 单位<br>Unit    |
|----------------|---|--------------|------------|------------|---------------|
|                |   | 最小值<br>Min   | 典型值<br>Typ | 最大值<br>Max |               |
| $V_{BR}$       | $I_R=1.0\text{mA}$ ( $T_a=25^\circ\text{C}$ ) | 100          |            |            | V             |
| $V_F$          | $I_F=5A$ ( $T_a=25^\circ\text{C}$ )           |              | 0.516      |            | V             |
|                | $I_F=7.5A$ ( $T_a=25^\circ\text{C}$ )         |              | 0.576      |            | V             |
|                | $I_F=15A$ ( $T_a=25^\circ\text{C}$ )          |              | 0.734      | 0.80       | V             |
|                | $I_F=5A$ ( $T_a=125^\circ\text{C}$ )          |              | 0.455      |            | V             |
|                | $I_F=7.5A$ ( $T_a=125^\circ\text{C}$ )        |              | 0.522      |            | V             |
|                | $I_F=15A$ ( $T_a=125^\circ\text{C}$ )         |              | 0.627      | 0.68       | V             |
| $I_R$ (Note 1) | $V_R=70V$ ( $T_a=25^\circ\text{C}$ )          |              | 7.2        |            | $\mu\text{A}$ |
|                | $V_R=70V$ ( $T_a=125^\circ\text{C}$ )         |              | 8.0        |            | $\text{mA}$   |
|                | $V_R=100V$ ( $T_a=25^\circ\text{C}$ )         |              | 65         | 500        | $\mu\text{A}$ |
|                | $V_R=100V$ ( $T_a=125^\circ\text{C}$ )        |              | 20         | 35         | $\text{mA}$   |

注/Notes:

- 使用极短的测试时间, 以尽量减少自热效应。/Short duration pulse test used to minimize self-heating effect.
- 除非特别注明, 数值为一个芯片的参数。/ Unless otherwise noted, values for the parameters of a single chip

