

**UAT1A-5****特高频高压二极管**

反向电压：5 kV，正向电流：1 A，反向恢复时间：50 ns

Ultra-Fast Recovery High Voltage Diode

Reverse Voltage：5 kV

Average Forward Current：1 A

Maximum Reverse Recovery Time：50 ns

**技术资料****Technical Data**

- 产品级别：外贸级
- 封装形式：环氧封装
- 引线：轴向
- 极性：色环指示负极
- Product Grade: International Standard
- Package Type: Epoxy Encapsulation
- Lead: Axial Lead
- Polarity: Cathode Indicated by Color Band

**产品标准****Product Standard**

Q/FT TRV0003-2022 《高压二极管》

**验收标准****Acceptance Criteria**

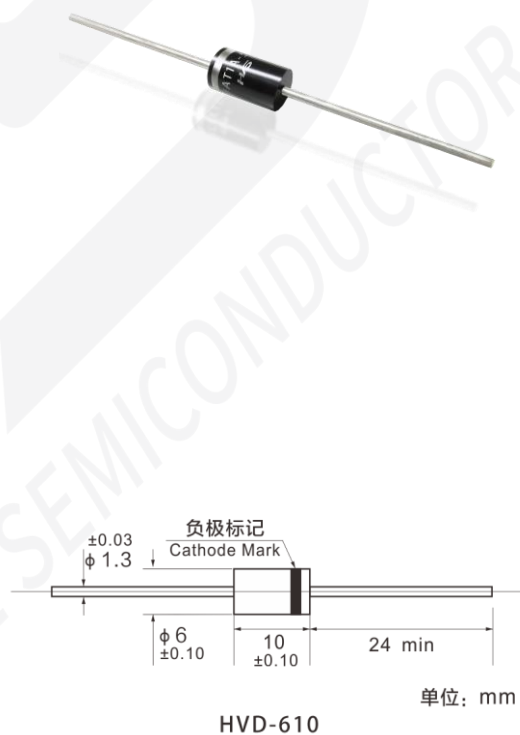
GB/T 4023-1997 《半导体器件分立器件和集成电路 第2部分：整流二极管》

Semiconductor Devices-Discrete Devices and Integrated Circuits-Part 2: Rectifier Diodes

**外形尺寸****External Dimensions**

封装代号：HVD-610；详见右图

Package Code: HVD-610; Please refer to the figure on the right.





## 特性及参数值

### Characteristics and Parameter

除非另有规定，环境温度均为 25°C。

The ambient temperature is 25°C unless otherwise specified.

| 电气特性<br>Electrical Characteristics                                          | 符 号<br>Symbol | 额定值<br>Ratings                     | 单 位<br>Unit |
|-----------------------------------------------------------------------------|---------------|------------------------------------|-------------|
| 最大反向重复峰值电压<br>Maximum Repetitive Peak Reverse Voltage                       | $V_{RRM}$     | 5                                  | kV          |
| 最大反向不重复峰值电压<br>Maximum Non-repetitive Peak Reverse Voltage                  | $V_{RSM}$     | 5.5                                | kV          |
| 最大正向平均电流<br>Maximum Average Forward Current<br>(@ $T_{oil} = 55^{\circ}C$ ) | $I_{F(AV)}$   | 1                                  | A           |
| 最大正向浪涌电流<br>Maximum Forward Surge Current                                   | $I_{FSM}$     | 60                                 | A           |
| 最大正向峰值电压<br>Maximum Peak Forward Voltage<br>(@ $I_F = I_{F(AV)}$ )          | $V_{FM}$      | $\leq 10$                          | V           |
| 最大直流反向电流<br>Maximum DC Reverse Current<br>(@ $V_R = V_{RRM}$ )              | $I_R$         | $\leq 2 (T_a = 25^{\circ}C)$       | $\mu A$     |
|                                                                             |               | $\leq 30 (T_{oil} = 100^{\circ}C)$ |             |
| 最大反向恢复时间<br>Maximum Reverse Recovery Time<br>( $I_F = 0.5A$ , $I_R = 1A$ )  | $t_{rr}$      | $\leq 50$                          | ns          |
| 有效工作结温<br>Operating Junction Temperature Range                              | $T_J$         | $-55 \sim +125$                    | $^{\circ}C$ |
| 贮存温度<br>Storage Temperature Range                                           | $T_{STG}$     | $-55 \sim +150$                    | $^{\circ}C$ |