

## 特種高壓二極管 High Voltage Diodes for Special Using

## ■特徵 Features

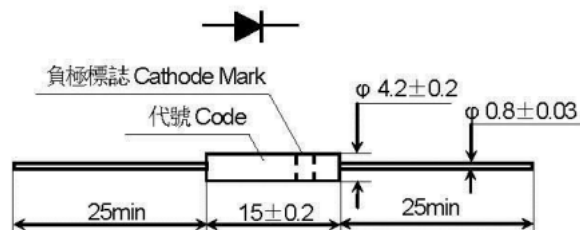
- 高可靠性 High reliability
- 高速開關 High speed switching

## ■用途 Applications

- 高壓電源整流用  
Rectification for high voltage power supply

## ■外形尺寸和印記 Outline Dimensions and Mark

單位 Unit: mm



## ■極限值（絕對最大額定值）

## Limiting Values (Absolute Maximum Rating)

| 參數名稱<br>Item                                        | 符號<br>Symbol | 單位<br>Unit         | HV57-10    | HV57-10F                                                                                                          |
|-----------------------------------------------------|--------------|--------------------|------------|-------------------------------------------------------------------------------------------------------------------|
| 反向重複峰值電壓<br>Repetitive Peak Reverse Voltage         | $V_{RRM}$    | kV                 | 10         | 10                                                                                                                |
| 正向平均電流<br>Average Forward Current                   | $I_{FA}$     | mA                 | 500        | (正弦半波 50Hz, 電阻負載, $T_a=25^{\circ}\text{C}$ )<br>(50Hz Half-sine wave, Resistance load, $T_a=25^{\circ}\text{C}$ ) |
| 正向（不重複）浪湧電流<br>Surge(Non-repetitive)Forward Current | $I_{FSM}$    | A                  | 3.5        | (正弦半波 50Hz, 一個周期, $T_a=25^{\circ}\text{C}$ )<br>(50Hz Half-sine wave, 1 cycle, $T_a=25^{\circ}\text{C}$ )         |
| 工作環境溫度<br>Operating Ambient Temperature             | $T_a$        | $^{\circ}\text{C}$ | -55 ~ +70  |                                                                                                                   |
| 貯存溫度<br>Storage Temperature                         | $T_{stg}$    | $^{\circ}\text{C}$ | -40 ~ +120 |                                                                                                                   |
| 有效結溫<br>Virtual Junction Temperature                | $T_{vj}$     | $^{\circ}\text{C}$ | 120        |                                                                                                                   |

■電特性 ( $T_a=25^{\circ}\text{C}$  除非另有規定)Electrical Characteristics ( $T_a=25^{\circ}\text{C}$  Unless otherwise specified)

| 參數名稱<br>Item                    | 符號<br>Symbol | 單位<br>Unit    | 測試條件<br>Test Condition                                                    | 最大值<br>Max                      |          |
|---------------------------------|--------------|---------------|---------------------------------------------------------------------------|---------------------------------|----------|
|                                 |              |               |                                                                           | HV57-10                         | HV57-10F |
| 正向峰值電壓<br>Peak Forward Voltage  | $V_{FM}$     | V             | $I_{FM}=500\text{mA}$                                                     | 25                              | 25       |
| 反向峰值電流<br>Peak Reverse Current  | $I_{RRM1}$   | $\mu\text{A}$ | $V_{RM}=V_{RRM}$<br>$T_a=25^{\circ}\text{C}$                              | 5                               |          |
|                                 | $I_{RRM2}$   |               |                                                                           | $T_a=100^{\circ}\text{C}$<br>50 |          |
| 反向恢復時間<br>Reverse Recovery Time | $t_{rr}$     | ns            | $I_F=0.5\text{ I}_{FM}; I_R=-1\text{ I}_{FM}; I_{RR}=-0.25\text{ I}_{FM}$ | 100                             | 80       |