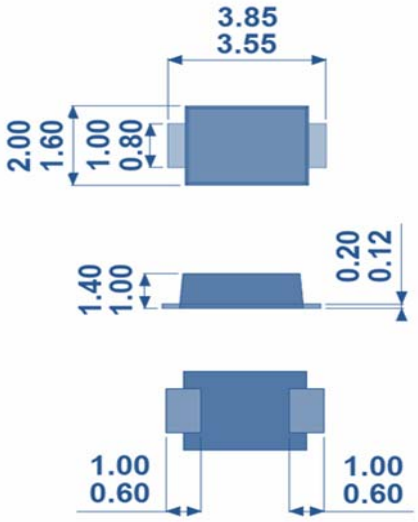
# US1000FL THRU US1010FL

## 1.0A Ultra Fast Recovery Rectifier

YENYO

### 1. 封裝 Package

- 封裝方式 Method: SOD-123S
- 封裝尺寸 Dimension: 如圖示




單位 Unit: millimeters

### 2. 產品特色 Features

- For surface mounted applications in order to optimize board space
- Ideal for automated placement
- Glass Passivated Chip Junction
- High temperature soldering : 260°C/10 seconds at terminals
- Lead-free & halogen-free parts, RoHS compliant

### 3. 機械數據 Mechanical Data

- Case: Molded plastic over passivated junction
- Terminals: Solder plated solderable per MIL-STD-750 Method 2026
- Polarity: Color band denotes cathode end
- Weight: approx.. 0.0173 grams

### 4. 極限值與電參數 Maximum Ratings & Electrical Characteristic

| PARAMETER | Symbol | US1000FL | US1001FL | US1002FL | US1004FL | US1006FL | US1008FL | US1010FL | UNITS |
|---|---|---|---|---|---|---|---|---|---|
| Marking Code | - | U1A | U1B | U1D | U1G | U1J | U1K | U1M | - |
| Repetitive Peak Reverse Voltage | $V_{RRM}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| RMS Voltage | $V_{RMS}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| DC Blocking Voltage | $V_{DC}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Average Forward Rectified Current $T_A$=25 °C | $I_{F(AV)}$ | 1.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3ms single half sine-wave $T_J$=25°C | $I_{FSM}$ | 30 | | | | | | | Amps |
| Max. Instantaneous Forward Voltage at 1.0A | $V_F$ | 1 | | | 1.4 | 1.7 | | | Volts |
| DC Reverse Current at Rated DC Blocking Voltage $T_J$=25℃ | $I_R$ | 3 | | | | | | | uA |
| Thermal Resistance ( NOTE 1) | $R_{\theta JA}$ | 200 | | | | | | | °C/W |
| Operating Junction and Storage Temperature Range | $T_J$, $T_{STG}$ | -55 to +150 | | | | | | | °C |
| Reverse Recovery Time $I_F$=0.5A $I_R$=1A $I_{RR}$=0.25A | $T_{rr}$ | 50 | | | | 75 | | | nS |

Notes:

(1) Mounted on an FR4 PCB, single-sided copper, mini pad.



R01,MAY-15

## 5. 特性曲線 Rating & Characteristic Curves

Fig. 1 Typical Forward Characteristics

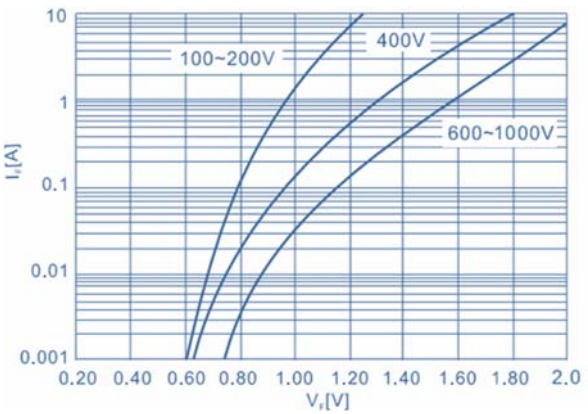



Fig. 2 Forward Current Derating Curve

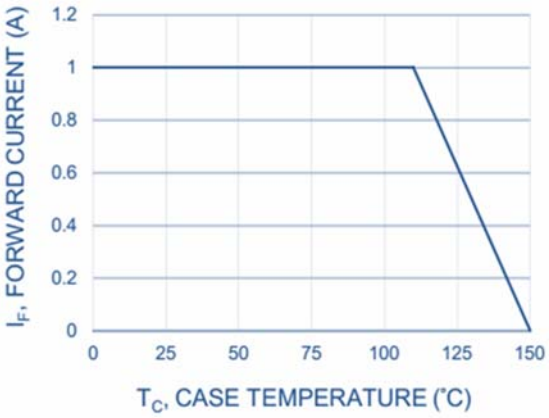
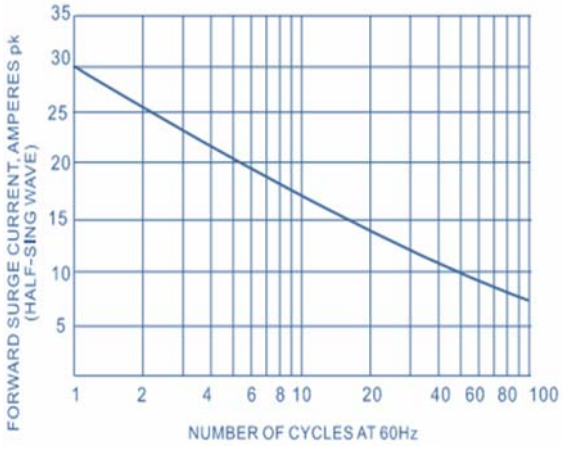



Fig. 3 Typical Reverse Characteristic



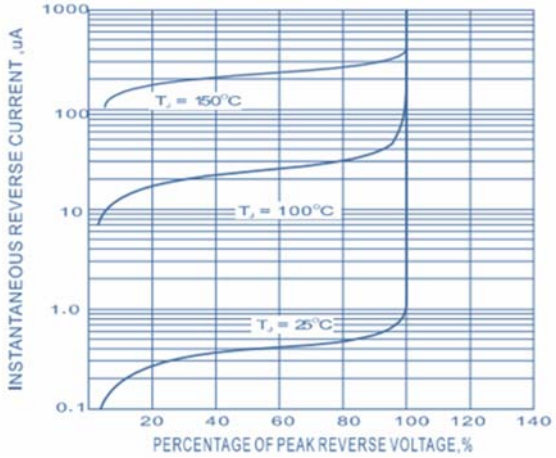


Fig. 4 Max. Non-Repetitive Surge Current