

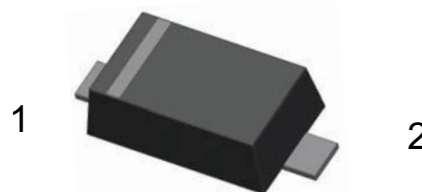
## Schottky Diodes

### 1N5817W ~ 1N5819W

#### ■ Features

- Low power loss, high efficiency
- High current capability
- Low forward voltage drop
- High Surge Capability

SOD-123F



Top View



#### PIN DESCRIPTION

| PIN | DESCRIPTION |
|-----|-------------|
| 1   | Cathode     |
| 2   | Anode       |

#### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter  | Symbol           | 1N5817W                   | 1N5818W | 1N5819W | Unit |
|--|------------------|---------------------------|---------|---------|------|
| Peak Repetitive Reverse Voltage                            | VRRM             | 20                        | 30      | 40      | V    |
| RMS Voltage  | VRMS             | 14                        | 21      | 28      |      |
| DC Blocking Voltage  | VDC              | 20                        | 30      | 40      |      |
| Forward Voltage @ $I_F=1\text{A}$                          | V <sub>F</sub>   | 0.45                      | 0.55    | 0.6     |      |
| Forward Voltage @ $I_F=3.1\text{A}$                        |                  | 0.75                      | 0.875   | 0.9     |      |
| Average Forward Rectified Current @ $T_L=90^\circ\text{C}$ | I <sub>FAV</sub> | 1                         |         |         | A    |
| Non-Repetitive Peak Forward Surge Current @8.3ms           | I <sub>FSM</sub> | 25                        |         |         |      |
| Reverse Voltage Leakage Current                            | I <sub>R</sub>   | $T_a = 25^\circ\text{C}$  | 1       |         | mA   |
|  |                  | $T_a = 100^\circ\text{C}$ | 10      |         |      |
| Typical Junction Capacitance                               | C <sub>J</sub>   | 110                       |         |         | pF   |
| Junction Temperature                                       | T <sub>J</sub>   | 125                       |         |         | °C   |
| Storage Temperature range                                  | T <sub>stg</sub> | -55 to 125                |         |         |      |

#### ■ Marking

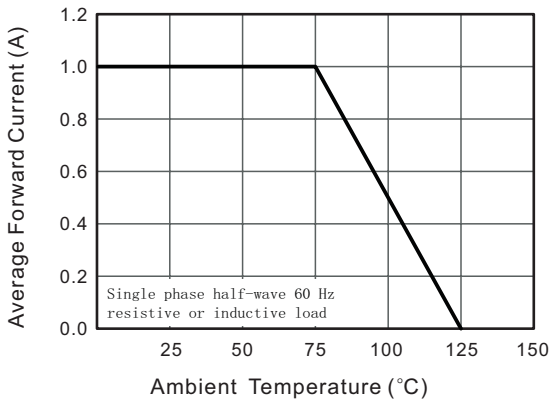
| NO.     | 1N5817W | 1N5818W | 1N5819W |
|---------|---------|---------|---------|
| Marking | 12A     | 13A     | 14A     |

## Schottky Diodes

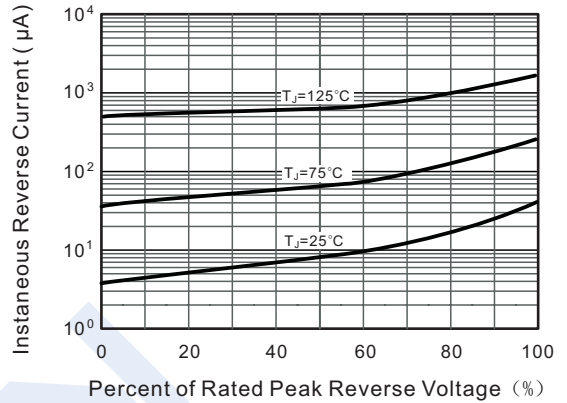
### 1N5817W ~ 1N5819W

■ Typical Characteristics

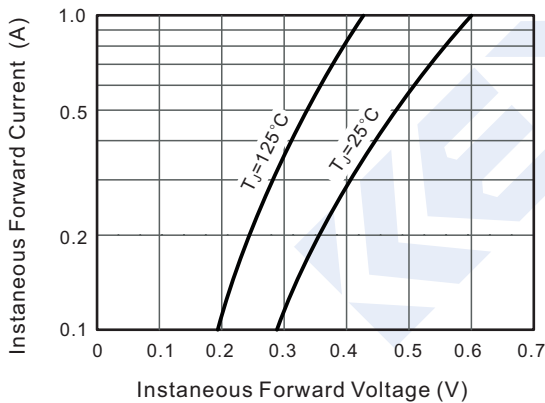
**Fig.1 Forward Current Derating Curve**



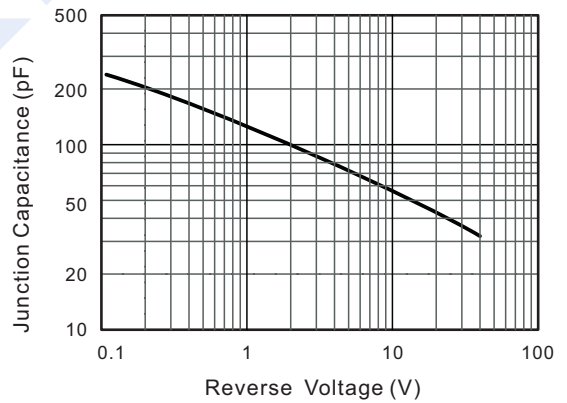
**Fig.2 Typical Reverse Characteristics**



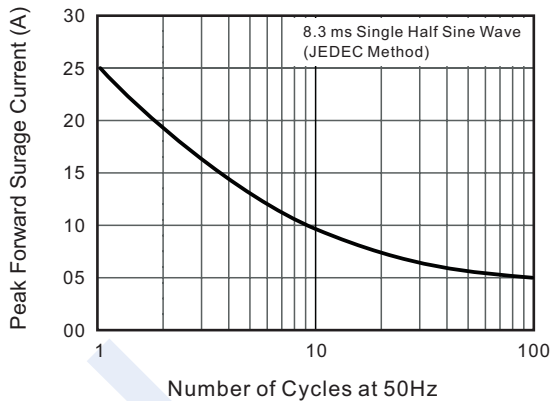
**Fig.3 Typical Forward Characteristic**



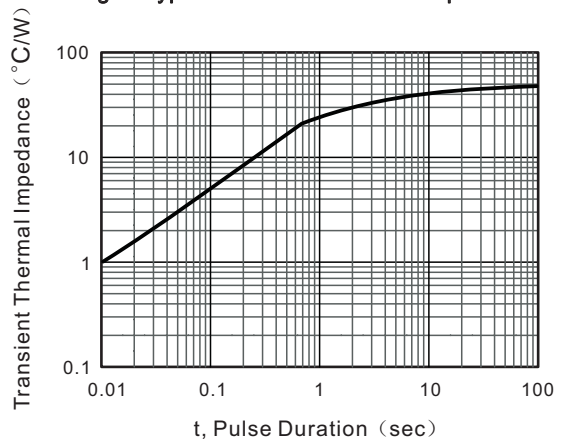
**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.6- Typical Transient Thermal Impedance**



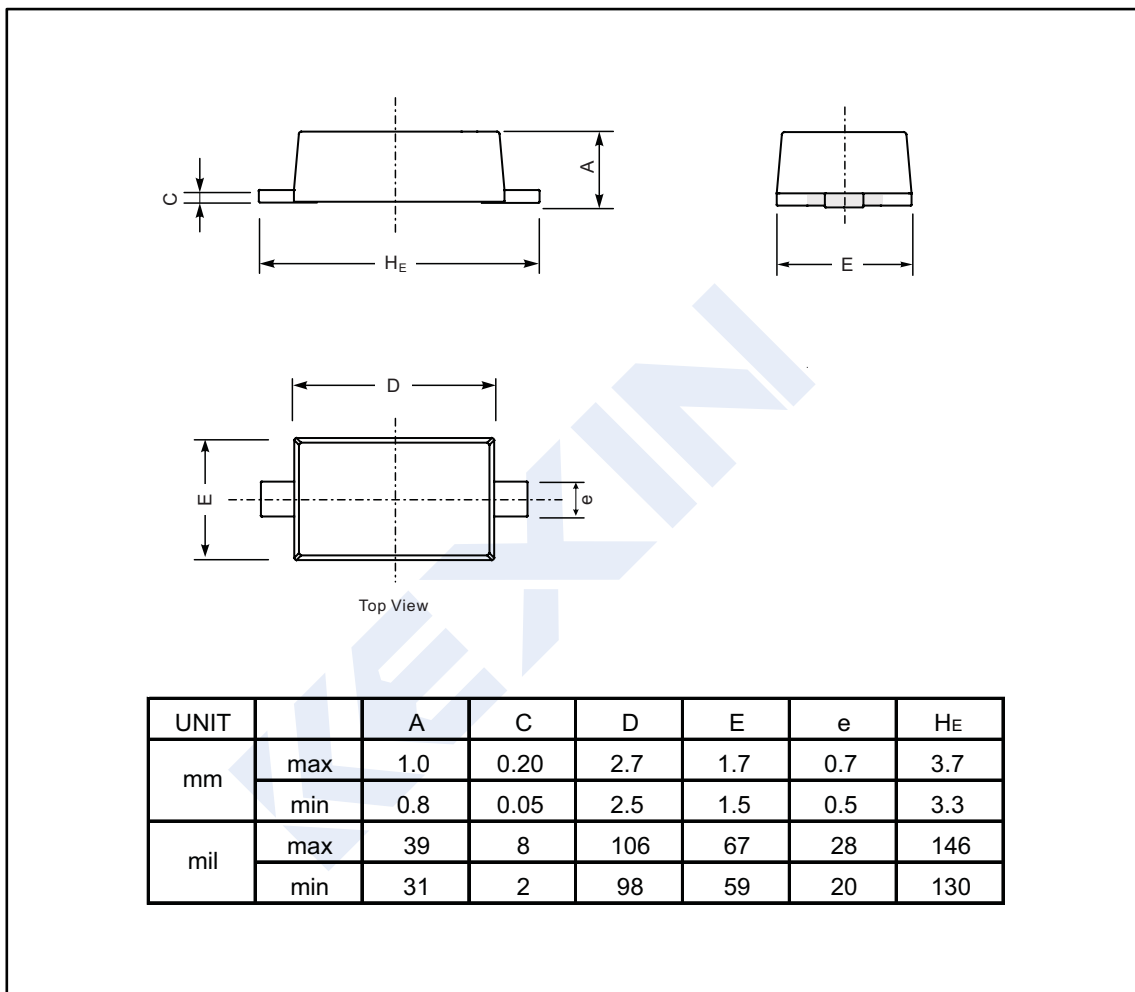
## Schottky Diodes

### 1N5817W ~ 1N5819W

#### ■ Package Outline Dimensions

Plastic surface mounted package; 2 leads

SOD-123F



#### ■ The Recommended Mounting Pad Size

