# WSB5558N

**Schottky Barrier Diode**

**Http://www.sh-willsemi.com**

## Features

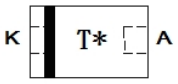
- 100mA Average rectified forward current
- Low forward voltage
- Low leakage current
- Small package DFN1006-2L


**DFN1006-2L**


**Circuit**

## Applications

- Low Current rectification




**Marking**

## Absolute maximum ratings

| Parameter | Symbol | Value | Unit |
|---|---|---|---|
| Reverse voltage (repetitive peak) | $V_{RM}$ | 30 | V |
| Reverse voltage (DC) | $V_R$ | 30 | V |
| Average rectified forward current | $I_O$ | 100 | mA |
| Peak forward surge current (8.3ms single sine pluse) | $I_{FSM}$ | 1 | A |
| Junction temperature | $T_J$ | 150 | °C |
| Operating temperature | Topr | -40 ~ 125 | °C |
| Storage temperature | Tstg | -40 ~ 150 | °C |

## Electronics characteristics ($T_A$=25°C)

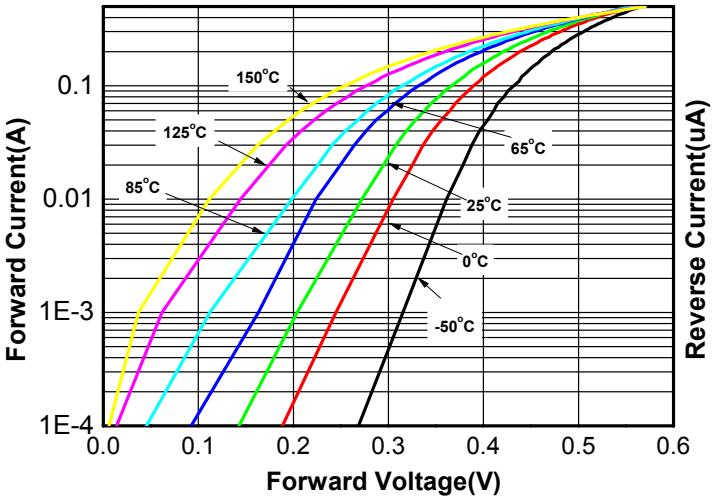
| Parameter | Symbol | Condition | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|---|
| Reverse Voltage | $V_R$ | $I_R$=100uA | 30 | | | |
| Forward Voltage | $V_F$ | $I_F$=10mA | | | 0.32 | V |
| | | $I_F$=100mA | | | 0.45 | V |
| Reverse current | $I_R$ | $V_R$=10V | | | 15 | uA |
| | | $V_R$=30V | | | 30 | uA |
| Junction capacitance | $C_J$ | $V_R$=5V, F=1MHz | | 21 | | pF |
| Thermal Resistance | $R_{\theta(JA)}$ | Junction to Ambient | | | 500 | K/W |

**Order Informations**

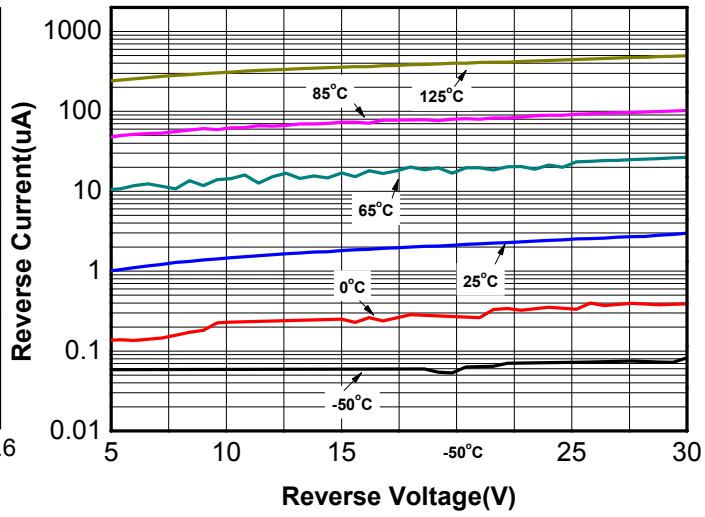
| Device | Package | Marking | Shipping |
|---|---|---|---|
| WSB5558N-2/TR | DFN1006-2L | T*(1) | 10000/Reel&Tape |

**Note 1：*= Month code(A~Z); T= Device code;**

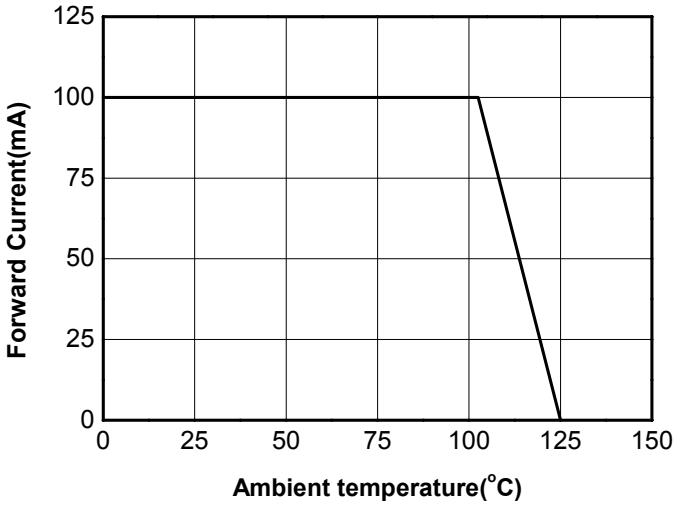
## Typical characteristics (Ta=25°C, unless otherwise noted)



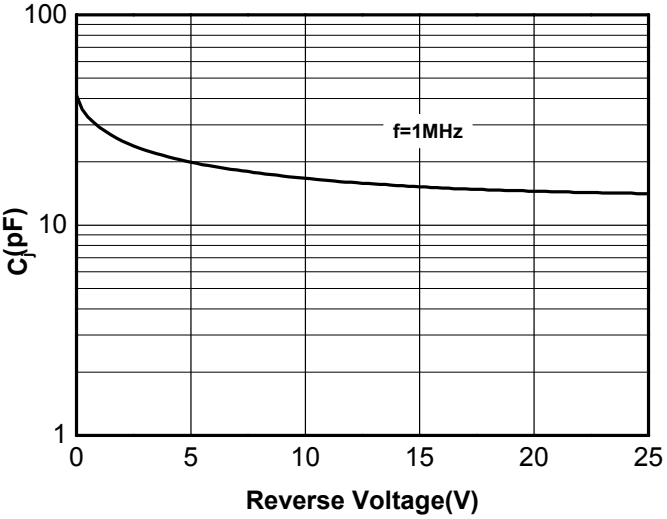

Forward voltage vs. Forward current




Reverse current vs. Reverse voltage



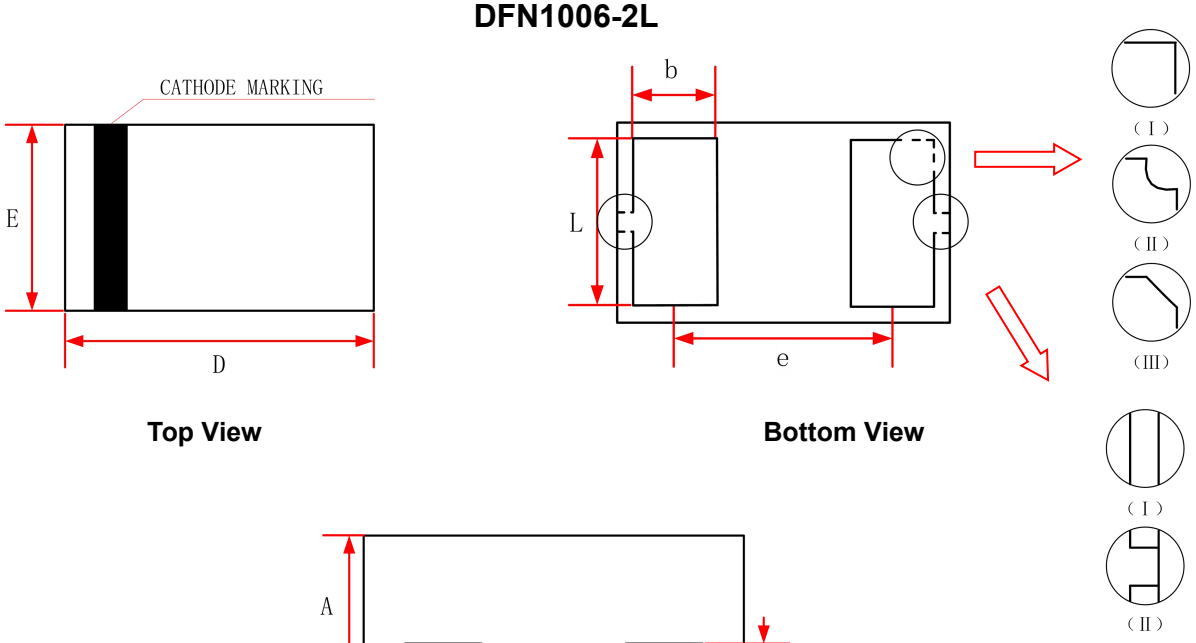

Forward current derating curve




Junction capacitance vs. Reverse voltage

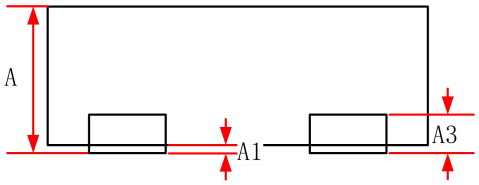
## Package outline dimensions

### DFN1006-2L




Top View

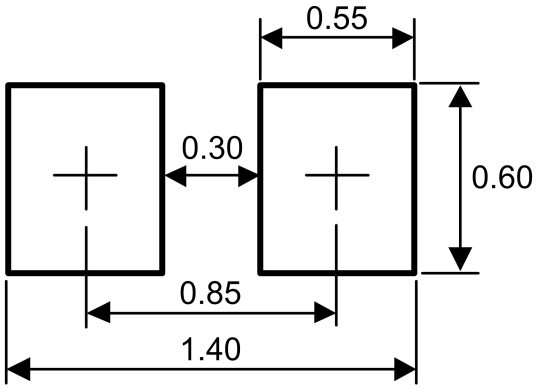
Bottom View




Side View

| | | | |
|---|---|---|---|
| | **Min.** | **Typ.** | **Max.** |
| A | 0.35 | 0.4 | 0.50 |
| A1 | 0.00 | - | 0.05 |
| A3 | 0.125 Ref. | | |
| D | 0.95 | 1.00 | 1.05 |
| E | 0.55 | 0.60 | 0.65 |
| b | 0.20 | 0.25 | 0.30 |
| L | 0.45 | 0.50 | 0.55 |
| e | 0.65 Typ. | | |

## Recommend land pattern (Unit: mm)




Notes:
This recommended land pattern is for reference purposes only. Please consult your manufacturing group to ensure your PCB design guidelines are met.