

**WSB5556Z**
**Schottky Barrier Diode**
[Http://www.sh-willsemi.com](http://www.sh-willsemi.com)

## Features

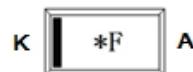
- 100mA Average rectified forward current
- Low forward voltage
- Low leakage current
- Small package DFN0603-2L


**DFN0603-2L(Bottom View)**


## Applications

### Circuit

- Low Current rectification



## Absolute maximum ratings

### Marking

| 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) | $I_{FSM}$ | 2         | A                  |
| Junction temperature                                 | $T_J$     | 150       | $^{\circ}\text{C}$ |
| Operating temperature                                | $T_{opr}$ | -40 ~ 150 | $^{\circ}\text{C}$ |
| Storage temperature                                  | $T_{stg}$ | -40 ~ 150 | $^{\circ}\text{C}$ |

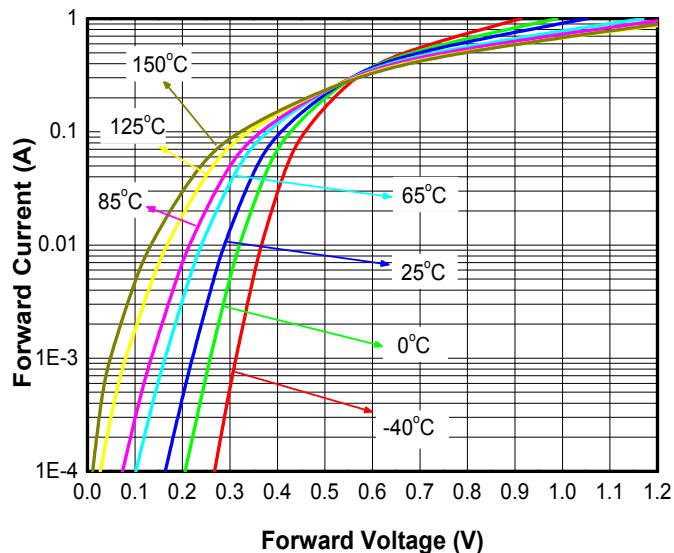
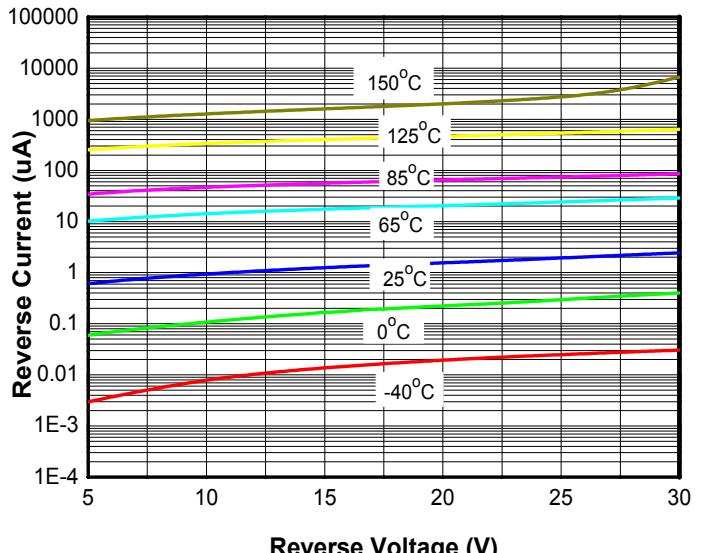
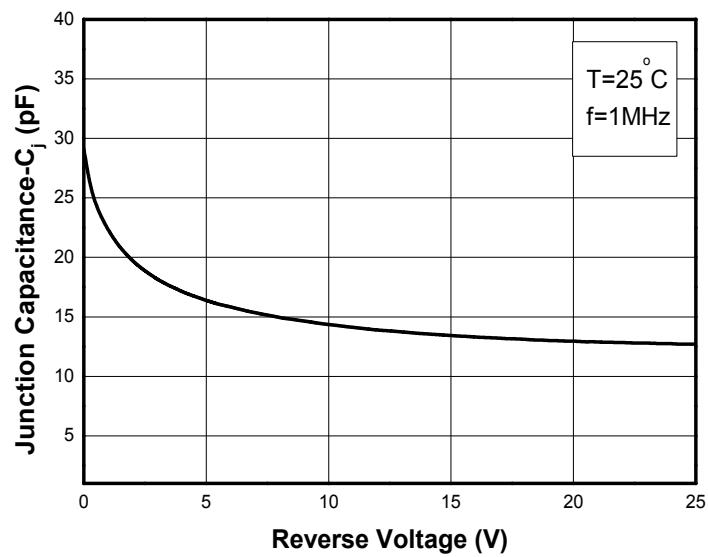
## Electronics characteristics ( $T_A=25^{\circ}\text{C}$ )

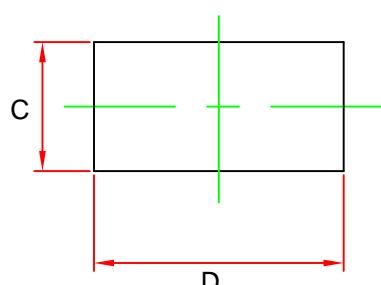
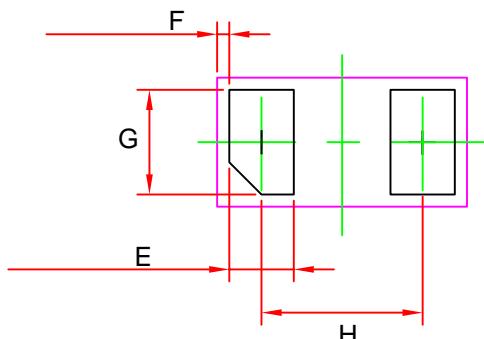
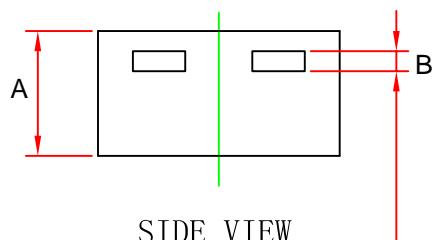
| Parameter            | Symbol           | Condition                      | Min. | Typ. | Max. | Unit          |
|----------------------|------------------|--------------------------------|------|------|------|---------------|
| Reverse Voltage      | $V_R$            | $I_R=100\mu\text{A}$           | 30   |      |      | V             |
| Forward Voltage      | $V_F$            | $I_F=1\text{mA}$               |      |      | 0.28 | V             |
|                      |                  | $I_F=10\text{mA}$              |      |      | 0.36 | V             |
| Reverse current      | $I_R$            | $V_R=10\text{V}$               |      |      | 6    | $\mu\text{A}$ |
|                      |                  | $V_R=30\text{V}$               |      |      | 15   | $\mu\text{A}$ |
| Junction capacitance | $C_J$            | $V_R=5\text{V}, F=1\text{MHz}$ |      | 16   |      | pF            |
| Thermal Resistance   | $R_{\theta(JA)}$ | Junction to Ambient            |      |      | 650  | K/W           |

## Order Information

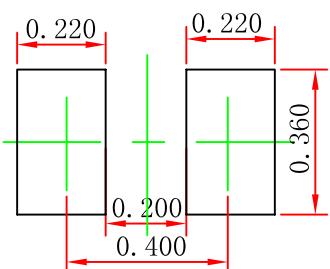
| Device        | Package    | Marking           | Shipping        |
|---------------|------------|-------------------|-----------------|
| WSB5556Z-2/TR | DFN0603-2L | *F <sup>(1)</sup> | 10000/Reel&Tape |

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

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

**Fig.1 Forward voltage vs. Forward current**

**Fig.2 Reverse current vs. Reverse voltage**

**Fig.3 Junction capacitance vs. Reverse voltage**

**Package outline dimensions**

TOP VIEW

BOTTOM VIEW

SIDE VIEW

| Symbol       | Dimensions in millimeter |       |       |
|--------------|--------------------------|-------|-------|
|              | Min.                     | Typ.  | Max.  |
| A            | 0.275                    | 0.310 | 0.340 |
| B 0.050 REF. |                          |       |       |
| C            | 0.270                    | 0.320 | 0.370 |
| D            | 0.570                    | 0.620 | 0.670 |
| E            | 0.125                    | 0.160 | 0.195 |
| F 0.030 REF. |                          |       |       |
| G            | 0.225                    | 0.260 | 0.295 |
| H            | 0.365                    | 0.400 | 0.435 |

**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.