

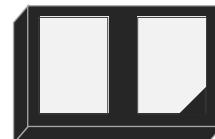
WSB5567D

Middle Power Schottky Barrier Diode

[Http://www.sh-willsemi.com](http://www.sh-willsemi.com)

Features

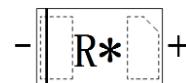
- 1.0A Average rectified forward current
- Low forward voltage
- Low leakage current



DFN1610-2L(Bottom view)



Circuit



Top Marking

Applications

- Switching circuit
- Middle current rectification

Absolute maximum ratings

| Parameter | Symbol | Value | Unit |
|--|-----------|-----------|------|
| Reverse voltage (repetitive peak) | V_{RM} | 40 | V |
| Reverse voltage (DC) | V_R | 40 | V |
| Average rectified forward current ⁽¹⁾ | I_O | 1.0 | A |
| Forward peak surge current ⁽²⁾ | I_{FSM} | 7 | A |
| Junction temperature | T_J | -55 ~ 150 | °C |
| Operating temperature | T_{opr} | -40 ~ 150 | °C |
| Storage temperature | T_{stg} | -55 ~ 150 | °C |

Electronics characteristics ($T_A=25^\circ C$)

| Parameter | Symbol | Condition | Min. | Typ. | Max. | Unit |
|--------------------------------|------------------|-----------------------------|------|------|------|------|
| Forward voltage ⁽³⁾ | V_F | $I_F=0.5A$ | - | 0.4 | 0.5 | V |
| | | $I_F=1.0A$ | - | 0.48 | 0.62 | V |
| Reverse current | I_R | $V_R=V_R$ | - | | 100 | uA |
| Junction capacitance | C_J | $V_R=4V, F=1MHz$ | - | | 35 | pF |
| Thermal resistance | $R_{\theta JSP}$ | Junction to Soldering point | - | - | 20 | K/W |

Order Informations

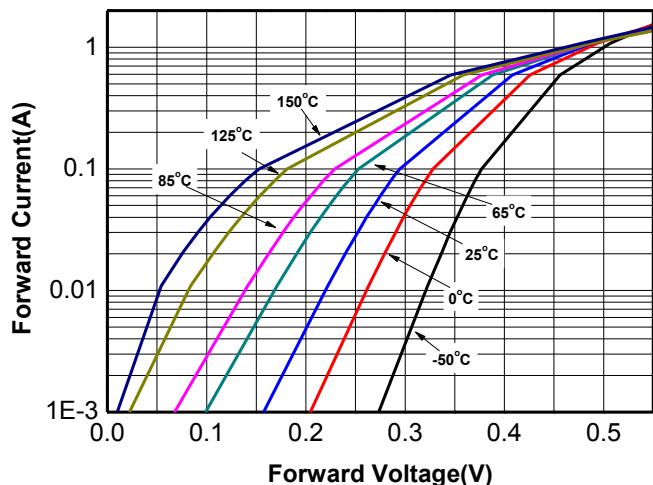
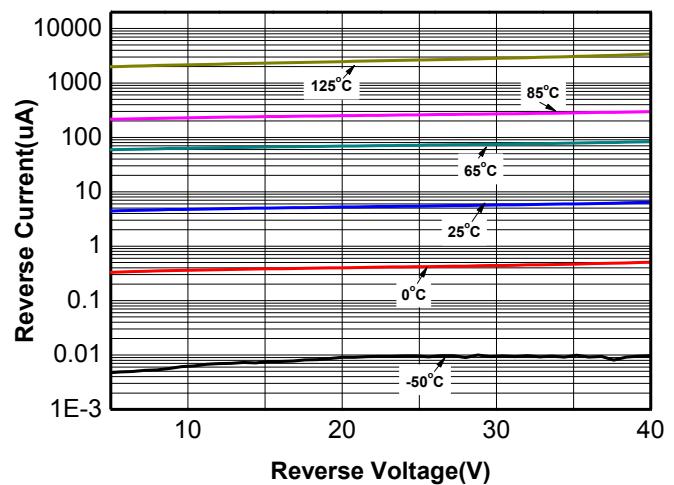
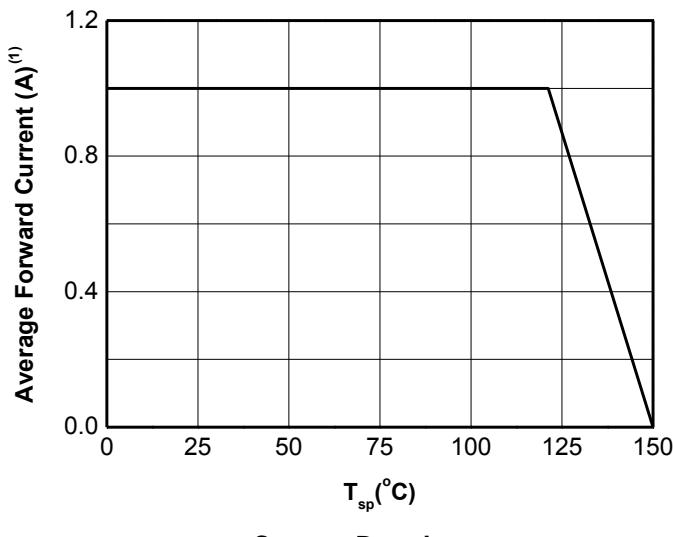
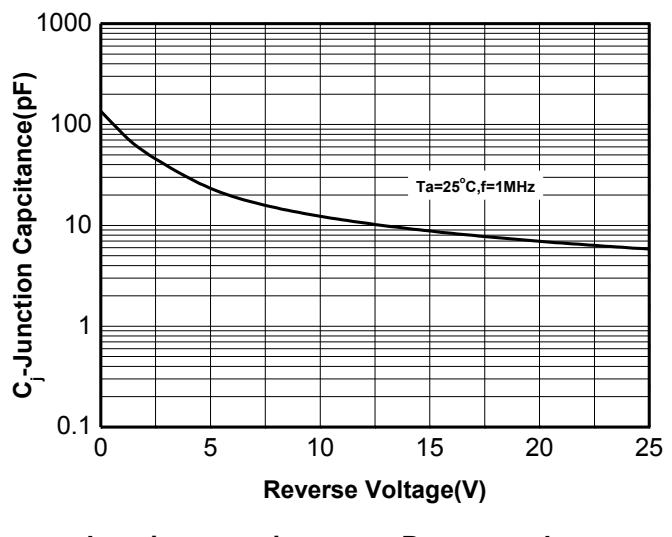
| Device | Package | Marking | Shipping |
|---------------|------------|-------------|----------------|
| WSB5567D-2/TR | DFN1610-2L | $R^*^{(4)}$ | 3000/Reel&Tape |

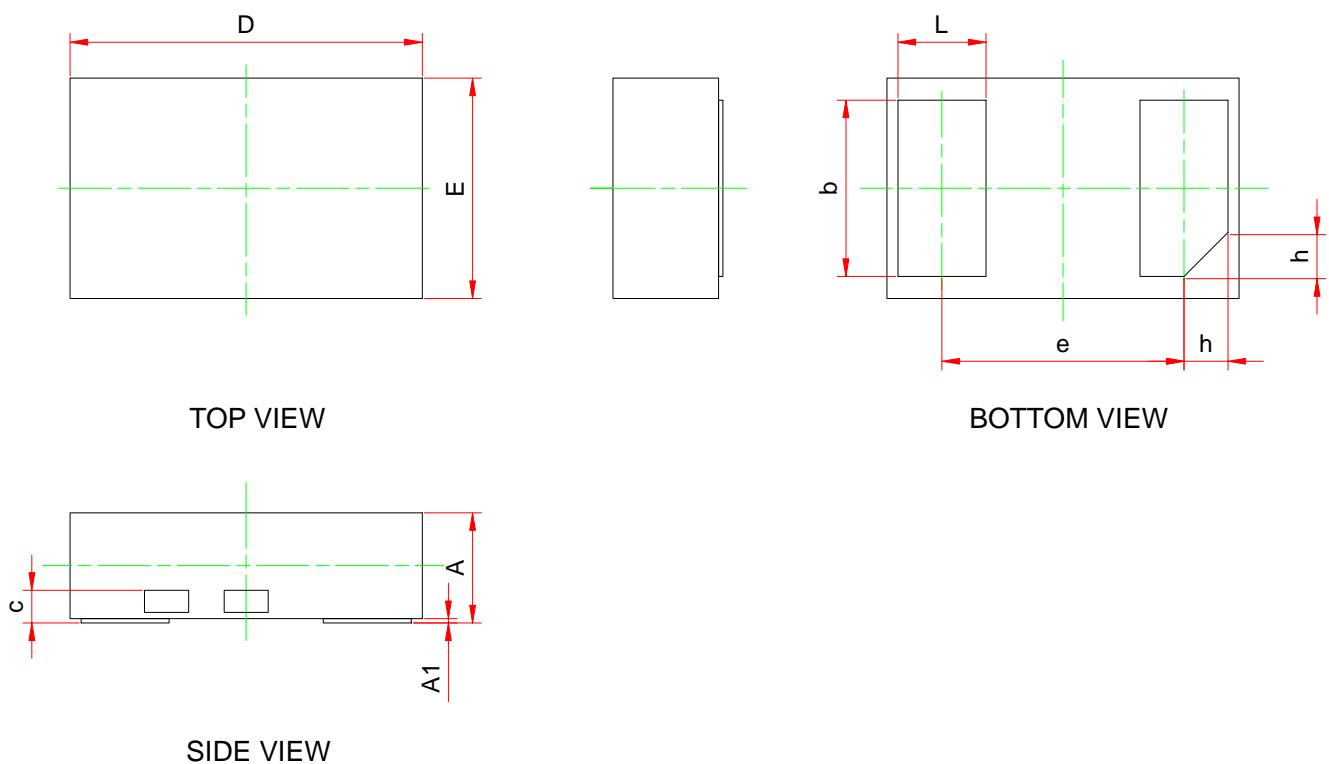
Note 1: Duty cycle=0.5, f=20kHz, square wave;

Note 2: Pulse Width=8.3ms, Single half sine Pulse

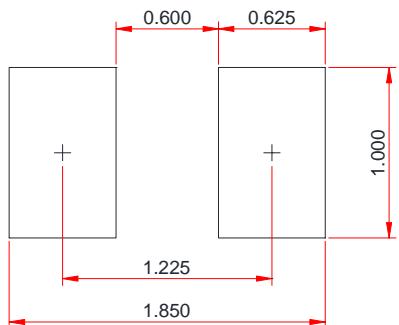
Note 3: Single Pulse test tp=380us;

Note 4: * = Month code (A~Z); R = Device code

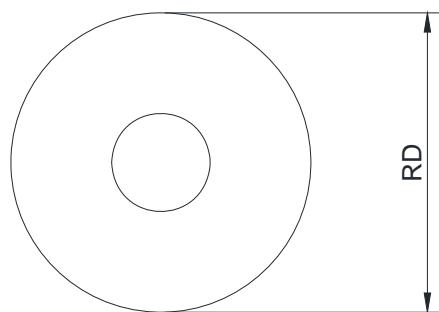
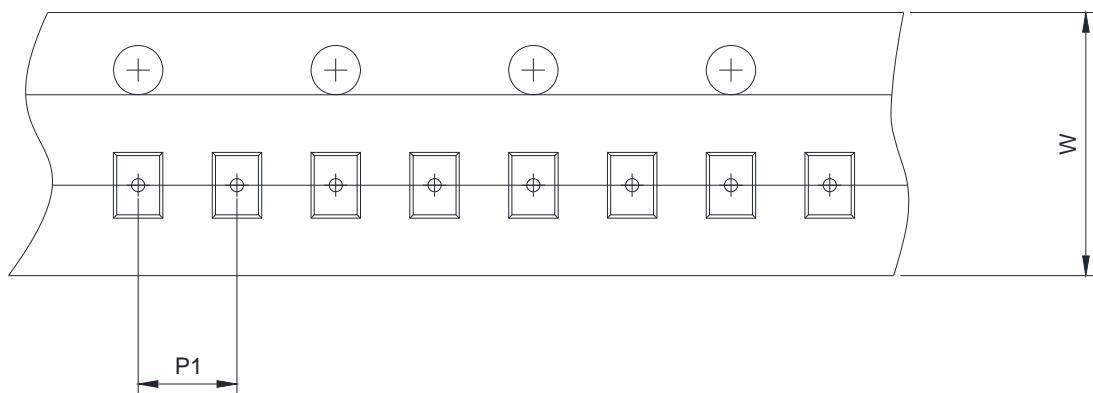
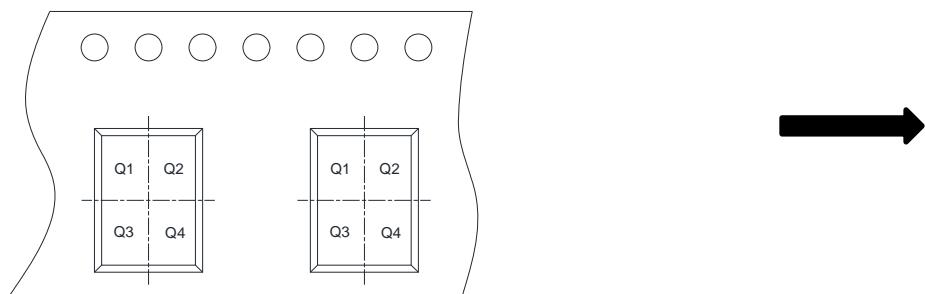
Typical characteristics (Ta=25°C, unless otherwise noted)

Forward voltage vs. Forward current

Reverse current vs. Reverse voltage

Current Derating

Junction capacitance vs. Reverse voltage

Package outline dimensions
DFN1610-2L


| Symbol | Dimensions in Millimeters | | |
|--------|---------------------------|------|------|
| | Min. | Typ. | Max. |
| A | 0.45 | 0.50 | 0.55 |
| A1 | 0.00 | 0.02 | 0.05 |
| c | 0.15 Ref. | | |
| b | 0.75 | 0.80 | 0.85 |
| L | 0.35 | 0.40 | 0.45 |
| D | 1.55 | 1.60 | 1.65 |
| E | 0.95 | 1.00 | 1.05 |
| e | 1.10 BSC | | |
| h | 0.20 Ref. | | |

Recommended PCB Layout (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.

TAPE AND REEL INFORMATION
Reel Dimensions

Tape Dimensions

Quadrant Assignments For PIN1 Orientation In Tape


| | | | |
|-------------|--|---|--|
| RD | Reel Dimension | <input checked="" type="checkbox"/> 7inch | <input type="checkbox"/> 13inch |
| W | Overall width of the carrier tape | <input checked="" type="checkbox"/> 8mm | <input type="checkbox"/> 12mm <input type="checkbox"/> 16mm |
| P1 | Pitch between successive cavity centers | <input type="checkbox"/> 2mm | <input checked="" type="checkbox"/> 4mm <input type="checkbox"/> 8mm |
| Pin1 | Pin1 Quadrant | <input checked="" type="checkbox"/> Q1 | <input checked="" type="checkbox"/> Q2 <input type="checkbox"/> Q3 <input type="checkbox"/> Q4 |

| 制修订记录 | | | | |
|-------------|----------|------|-------|------|
| 文件版本 | 制修日期 | 修订页次 | 修订人 | 变更内容 |
| Rev 1.0 | 20200115 | | 衷世雄 | 建立文档 |
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| 各部门会签 | | | | |
| 应用部 | 封装部 | 市场部 | 生产管理部 | |
| | | | | |
| 市场部上传者/上传时间 | | | | |
| 品质部确认者/确认时间 | | | | |