



DS520-30 Schottky Barrier Diode

Feature

- Small surface mounting type
- Low reverse current and low forward voltage
- High reliability

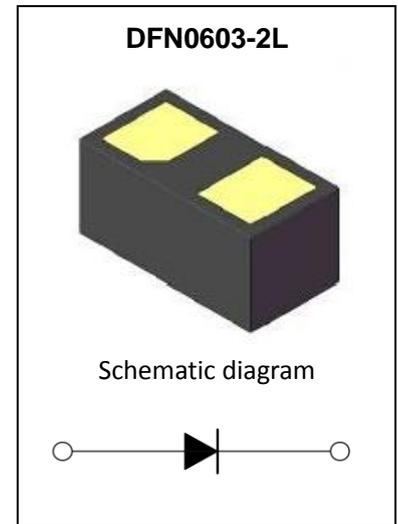
Application

- High speed switch for detection
- For portable equipment:(Mobile phone, MP3, MD, CD-ROM, DVD-ROM, Note book PC, etc.)

MARKING:



Front Side



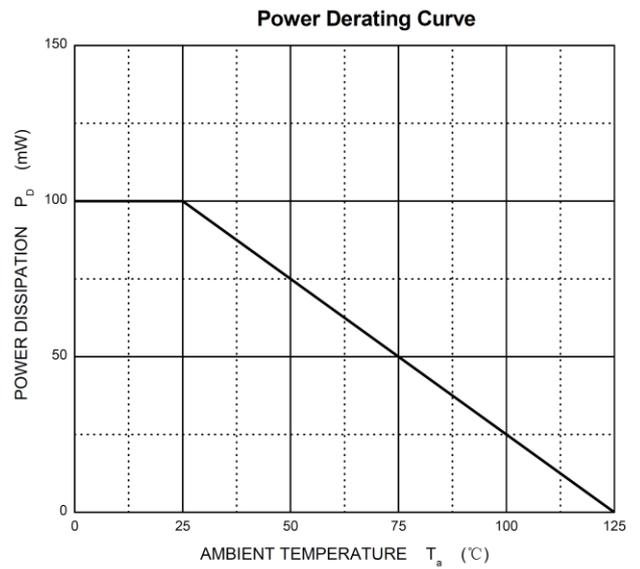
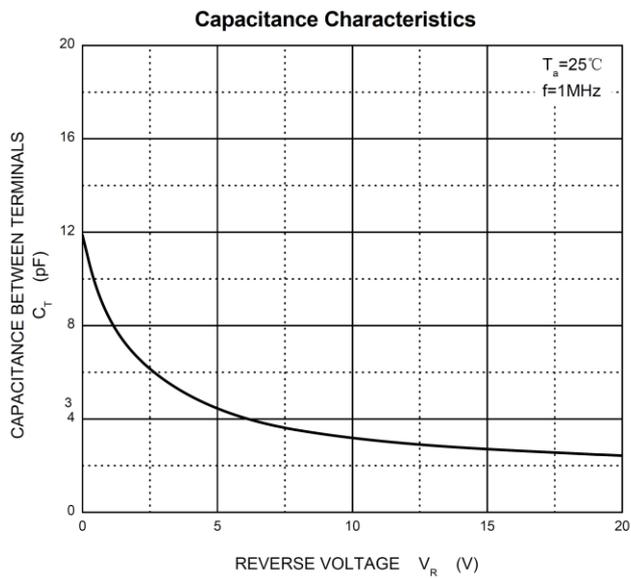
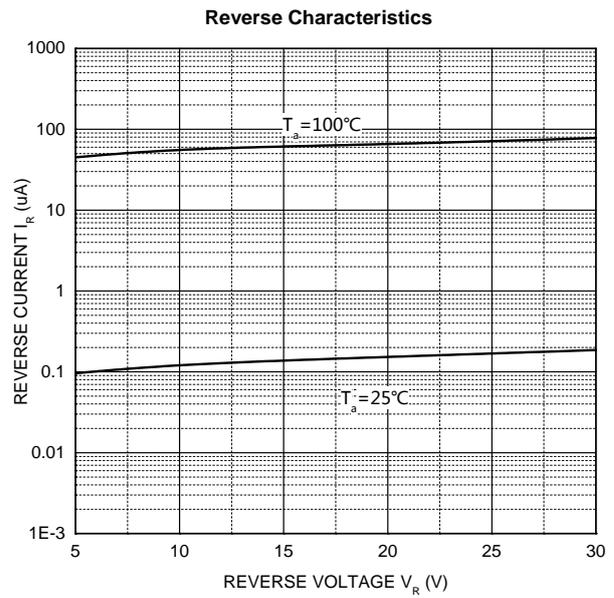
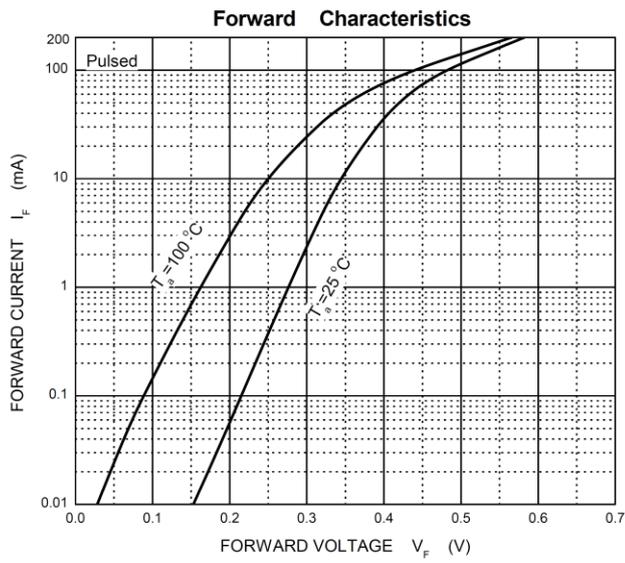
ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

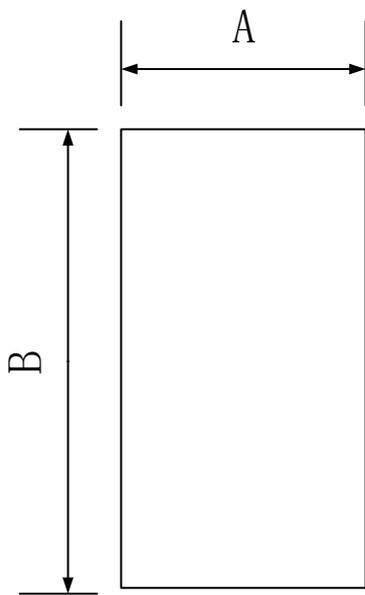
| Parameter | Symbol | Value | Unit |
|--|-----------------|------------|-----------------------------|
| DC reverse voltage | V_R | 30 | V |
| RMS reverse Voltage | $V_{R(RMS)}$ | 21 | V |
| Mean rectifying current | I_o | 0.1 | A |
| Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$ | I_{FSM} | 0.5 | A |
| Power Dissipation | P_D | 100 | mW |
| Thermal Resistance from Junction to Ambient | $R_{\theta JA}$ | 1000 | $^{\circ}\text{C}/\text{W}$ |
| Junction Temperature | T_J | 125 | $^{\circ}\text{C}$ |
| Storage Temperature | T_{STG} | -55 ~ +150 | $^{\circ}\text{C}$ |

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

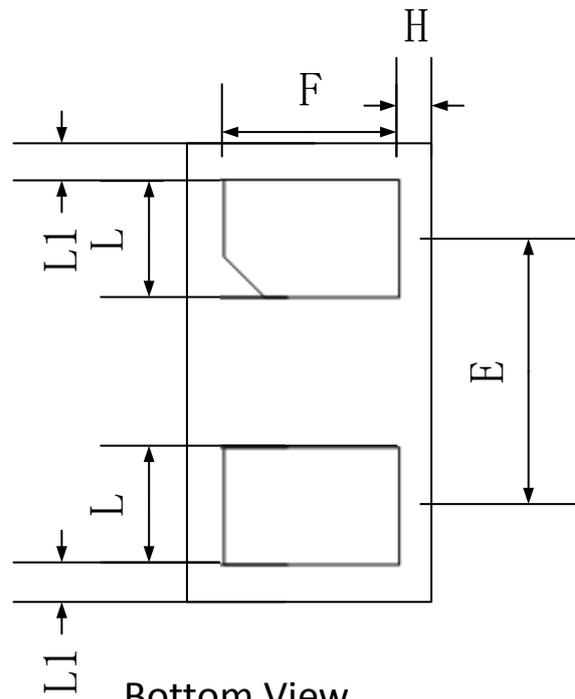
| Parameter | Symbol | Test Condition | Min | Type | Max | Unit |
|-----------------|----------|-----------------------|-----|------|------|---------------|
| Reverse voltage | V_{BR} | $I_R = 50\mu\text{A}$ | 30 | | | V |
| Reverse current | I_R | $V_R = 10\text{V}$ | | | 0.3 | μA |
| | | $V_R = 30\text{V}$ | | | 20 | μA |
| Forward voltage | V_F | $I_F = 10\text{mA}$ | | | 0.45 | V |
| | | $I_F = 100\text{mA}$ | | | 0.65 | V |

Typical Characteristics

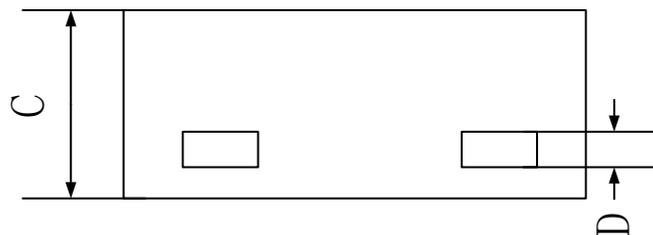


DFN0603-2L Package Outline Dimensions


Top View



Bottom View



Side View

| | Dimensions In Millimeters | | |
|----|---------------------------|------|------|
| | Min. | Typ. | Max. |
| A | 0.25 | 0.30 | 0.35 |
| B | 0.55 | 0.60 | 0.65 |
| C | 0.27 | 0.30 | 0.34 |
| D | 0.050REF | | |
| E | - | 0.35 | - |
| F | 0.20 | 0.25 | 0.35 |
| H | 0.045 REF | | |
| L | 0.13 | 0.18 | 0.23 |
| L1 | 0.045REF | | |