



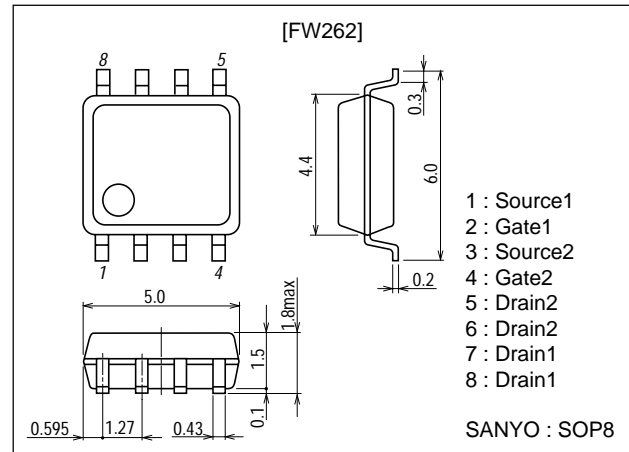
Preliminary

Features

- Low ON-resistance.
- 2.5V drive.

Package Dimensions

unit : mm
0000



Specifications

Absolute Maximum Ratings at Ta=25°C

| Parameter | Symbol | Conditions | Ratings | Unit |
|-----------------------------|------------------|---|-------------|------|
| Drain-to-Source Voltage | V _{DSS} | | 30 | V |
| Gate-to-Source Voltage | V _{GSS} | | ±10 | V |
| Drain Current (DC) | I _D | | 9 | A |
| Drain Current (Pulse) | I _{DP} | PW≤10μs, duty cycle≤1% | 52 | A |
| Allowable Power Dissipation | P _D | Mounted on a ceramic board (1000mm ² X0.8mm) | 1.7 | W |
| Total Dissipation | P _T | Mounted on a ceramic board (1000mm ² X0.8mm) | 2.0 | W |
| Channel Temperature | T _{ch} | | 150 | °C |
| Storage Temperature | T _{stg} | | -55 to +150 | °C |

Electrical Characteristics at Ta=25°C

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|--|----------------------|---|---------|-----|-----|------|
| | | | min | typ | max | |
| Drain-to-Source Breakdown Voltage | V _{(BR)DSS} | I _D =1mA, V _{GS} =0 | 30 | | | V |
| Zero-Gate Voltage Drain Current | I _{DSS} | V _{DS} =30V, V _{GS} =0 | | | 1 | μA |
| Gate-to-Source Leakage Current | I _{GSS} | V _{GS} =±8V, V _{DS} =0 | | | ±10 | μA |
| Cutoff Voltage | V _{GS(off)} | V _{DS} =10V, I _D =1mA | 0.4 | | 1.3 | V |
| Forward Transfer Admittance | y _{fs} | V _{DS} =10V, I _D =9A | 19.5 | 28 | | S |
| Static Drain-to-Source On-State Resistance | R _{DS(on)1} | I _D =9A, V _{GS} =4V | | 12 | 16 | mΩ |
| | R _{DS(on)2} | I _D =2A, V _{GS} =2.5V | | 14 | 20 | mΩ |

Marking : W262

Continued on next page.

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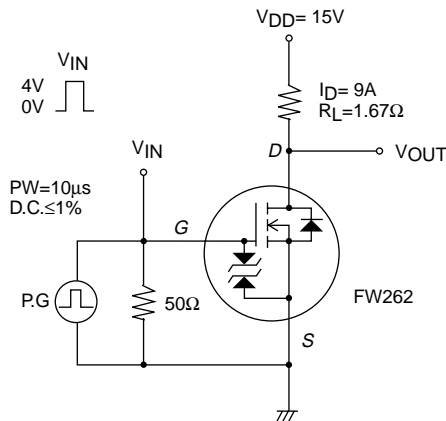
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Continued from preceding page.

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|-------------------------------|---------------------|--|---------|------|-----|------|
| | | | min | typ | max | |
| Input Capacitance | Ciss | V _{DS} =10V, f=1MHz | | 2350 | | pF |
| Output Capacitance | Coss | V _{DS} =10V, f=1MHz | | 390 | | pF |
| Reverse Transfer Capacitance | Crss | V _{DS} =10V, f=1MHz | | 330 | | pF |
| Turn-ON Delay Time | t _{d(on)} | See specified Test Circuit | | 25 | | ns |
| Rise Time | t _r | See specified Test Circuit | | 240 | | ns |
| Turn-OFF Delay Time | t _{d(off)} | See specified Test Circuit | | 215 | | ns |
| Fall Time | t _f | See specified Test Circuit | | 295 | | ns |
| Total Gate Charge | Qg | V _{DS} =10V, V _{GS} =10V, I _D =9A | | 72 | | nC |
| Gate-to-Source Charge | Qgs | V _{DS} =10V, V _{GS} =10V, I _D =9A | | 5 | | nC |
| Gate-to-Drain "Miller" Charge | Qgd | V _{DS} =10V, V _{GS} =10V, I _D =9A | | 7.8 | | nC |
| Diode Forward Voltage | V _{SD} | I _S =9A, V _{GS} =0 | | 0.82 | 1.2 | V |

Switching Time Test Circuit



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