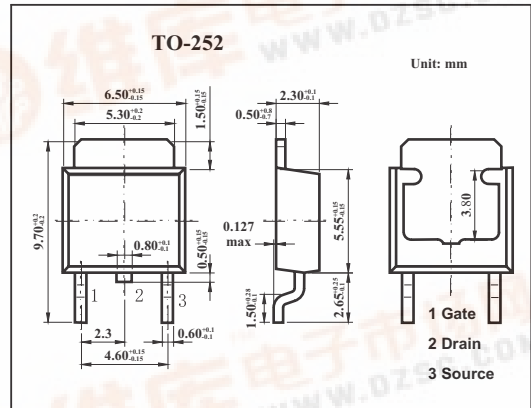
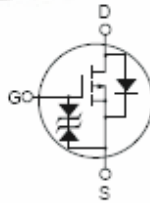


SMD Type MOSFET

High Speed Power Switching  
2SJ527S

Features

- Low on-resistance  
RDS(on) = 0.3Ω typ.
- Low drive current
- High speed switching
- 4V gate drive devices.



Absolute Maximum Ratings Ta = 25°C

| Parameter               | Symbol           | Rating      | Unit |
|-------------------------|------------------|-------------|------|
| Drain to source voltage | V <sub>DSS</sub> | -60         | V    |
| Gate to source voltage  | V <sub>GSS</sub> | ±20         | V    |
| Drain current (DC)      | I <sub>D</sub>   | -5          | A    |
| Drain current(pulse) *  | I <sub>D</sub>   | -20         | A    |
| Power dissipation       | P <sub>D</sub>   | 20          | W    |
| Channel temperature     | T <sub>ch</sub>  | 150         | °C   |
| Storage temperature     | T <sub>stg</sub> | -55 to +150 | °C   |

\* PW ≤ 10 μs, duty cycle ≤ 1 %

Electrical Characteristics Ta = 25°C

| Parameter                           | Symbol               | Testconditons   | Min  | Typ | Max  | Unit |
|-------------------------------------|----------------------|---|------|-----|------|------|
| Drain to source breakdown voltage   | V <sub>DSS</sub>     | I <sub>D</sub> =-10mA, V <sub>GS</sub> =0                           | -60  |     |      | V    |
| Gate to source breakdown voltage    | V <sub>GSS</sub>     | I <sub>G</sub> = ±100 μA, V <sub>DS</sub> =0                        | ±20  |     |      | V    |
| Drain cut-off current               | I <sub>DSS</sub>     | V <sub>DS</sub> =-60V, V <sub>GS</sub> =0                           |      |     | -10  | μA   |
| Gate leakage current                | I <sub>GSS</sub>     | V <sub>GS</sub> = ±16V, V <sub>DS</sub> =0                          |      |     | ±10  | μA   |
| Gate to source cutoff voltage       | V <sub>GS(off)</sub> | V <sub>DS</sub> =-10V, I <sub>D</sub> =-1mA                         | -1.0 |     | -2.0 | V    |
| Forward transfer admittance         | Y <sub>fs</sub>      | V <sub>DS</sub> =-10V, I <sub>D</sub> =-3A                          | 1.8  | 3   |      | S    |
| Drain to source on-state resistance | R <sub>DSON</sub>    | V <sub>GS</sub> =-10V, I <sub>D</sub> =-3A                          |      | 0.3 | 0.4  | Ω    |
|                                     |                      | V <sub>GS</sub> =-4.0V, I <sub>D</sub> =-3A                         |      | 0.5 | 0.8  | Ω    |
| Input capacitance                   | C <sub>iss</sub>     | V <sub>DS</sub> =-10V, V <sub>GS</sub> =0, f=1MHZ                   |      | 220 |      | pF   |
| Output capacitance                  | C <sub>oss</sub>     |   | 110  |     | pF   |      |
| Reverse transfer capacitance        | C <sub>rss</sub>     |   | 35   |     | pF   |      |
| Turn-on delay time                  | t <sub>d(on)</sub>   |   |      | 10  |      | ns   |
| Rise time                           | t <sub>r</sub>       | V <sub>GS(on)</sub> =-10V, I <sub>D</sub> =-3A, R <sub>L</sub> =10Ω |      | 30  |      | ns   |
| Turn-off delay time                 | t <sub>d(off)</sub>  |   |      | 45  |      | ns   |
|                                     | t <sub>f</sub>       |   |      | 35  |      | ns   |

