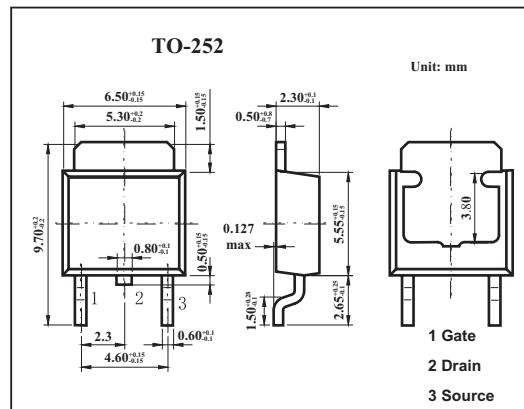
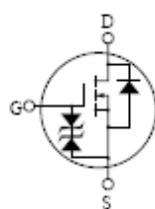


■ Features

- Low on-resistance
 $R_{DS(on)} = 0.042 \Omega$ typ.
- High speed switching



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Rating | Unit |
|-------------------------|------------|-------------|------------------|
| Drain to source voltage | V_{DSS} | 60 | V |
| Gate to source voltage | V_{GSS} | ± 20 | V |
| Drain current | I_D | 15 | A |
| | I_{Dp}^* | 60 | A |
| Power dissipation | P_D | 25 | W |
| Channel temperature | T_{ch} | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

* $PW \leq 10 \mu\text{s}$, Duty Cycle $\leq 1\%$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Testconditions | Min | Typ | Max | Unit |
|-------------------------------------|----------------------|---|-----|-------|----------|---------------|
| Drain to source breakdown voltage | V_{DSS} | $I_D=10\text{mA}, V_{GS}=0$ | 60 | | | V |
| Drain cut-off current | I_{DSS} | $V_{DS}=60\text{V}, V_{GS}=0$ | | | 10 | μA |
| Gate leakage current | I_{GSS} | $V_{GS}=\pm 16\text{V}, V_{DS}=0$ | | | ± 10 | μA |
| Gate to source cutoff voltage | $V_{GS(\text{off})}$ | $V_{DS}=10\text{V}, I_D=1\text{mA}$ | 1.5 | | 2.5 | V |
| Forward transfer admittance | $ Y_{fs} $ | $V_{DS}=10\text{V}, I_D=8\text{A}$ | 7 | 11 | | S |
| Drain to source on-state resistance | $R_{DS(on)}$ | $V_{GS}=10\text{V}, I_D=8\text{A}$ | | 0.042 | 0.055 | Ω |
| | | $V_{GS}=4\text{V}, I_D=8\text{A}$ | | 0.065 | 0.11 | Ω |
| Input capacitance | C_{iss} | $V_{DS}=10\text{V}, V_{GS}=0, f=1\text{MHz}$ | | 500 | | pF |
| Output capacitance | C_{oss} | | | 260 | | pF |
| Reverse transfer capacitance | C_{rss} | | | 110 | | pF |
| Turn-on delay time | t_{on} | $I_D=8\text{A}, V_{GS(\text{on})}=10\text{V}, R_L=3.75\Omega$ | | 10 | | ns |
| Rise time | t_r | | | 80 | | ns |
| Turn-off delay time | t_{off} | | | 100 | | ns |
| Fall time | t_f | | | 110 | | ns |