

■ Features

- Low gate charge

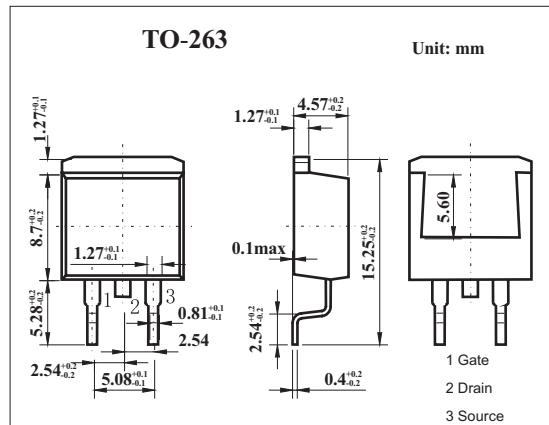
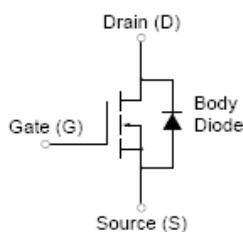
$Q_G = 26 \text{ nC TYP. } (I_D = 7.5 \text{ A}, V_{DD} = 450 \text{ V}, V_{GS} = 10 \text{ V})$

- Gate voltage rating $\pm 30 \text{ V}$

- Low on-state resistance

$R_{DS(on)} = 1.2 \Omega \text{ MAX. } (V_{GS} = 10 \text{ V}, I_D = 3.75 \text{ A})$

- Avalanche capability ratings



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

| Parameter | Symbol | Rating | Unit |
|---|------------|-------------|------------------|
| Drain to source voltage | V_{DSS} | 600 | V |
| Gate to source voltage | V_{GSS} | ± 30 | V |
| Drain current | I_D | ± 7.5 | A |
| | I_{Dp}^* | ± 30 | A |
| Power dissipation $T_a=25^\circ\text{C}$ $T_c=25^\circ\text{C}$ | P_D | 1.5 | W |
| | | 70 | |
| 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 | Testconditons | Min | Typ | Max | Unit |
|-------------------------------------|---------------|--|-----|------|-----------|---------------|
| Drain cut-off current | I_{DSS} | $V_{DS}=600\text{V}, V_{GS}=0$ | | | 100 | μA |
| Gate leakage current | I_{GSS} | $V_{GS}=\pm 30\text{V}, V_{DS}=0$ | | | ± 100 | μA |
| Gate to source cut off voltage | $V_{GS(off)}$ | $V_{DS}=10\text{V}, I_D=1\text{mA}$ | 2.5 | | 3.5 | V |
| Forward transfer admittance | $ Y_{fs} $ | $V_{DS}=10\text{V}, I_D=3.75\text{A}$ | 2.0 | | | S |
| Drain to source on-state resistance | $R_{DS(on)}$ | $V_{GS}=10\text{V}, I_D=3.75\text{A}$ | | 0.9 | 1.2 | Ω |
| Input capacitance | C_{iss} | $V_{DS}=10\text{V}, V_{GS}=0, f=1\text{MHz}$ | | 1100 | | pF |
| Output capacitance | C_{oss} | | | 200 | | pF |
| Reverse transfer capacitance | C_{rss} | | | 20 | | pF |
| Turn-on delay time | t_{on} | $I_D=3.75\text{A}, V_{GS(on)}=10\text{V}, V_{DD}=150\text{V}, R_G=1\Omega, R_L=50\Omega$ | | 18 | | ns |
| Rise time | t_r | | | 15 | | ns |
| Turn-off delay time | t_{off} | | | 50 | | ns |
| Fall time | t_f | | | 15 | | ns |