

P-CHANNEL J-FET
 Equivalent To MIL-PRF-19500/296

DEVICES

2N2609

LEVELS

MQ = JAN Equivalent

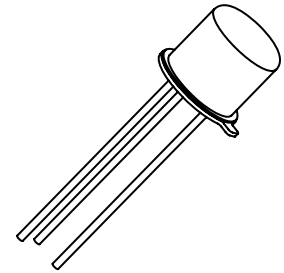
ABSOLUTE MAXIMUM RATINGS ($T_C = +25^\circ\text{C}$ unless otherwise noted)

| Parameters / Test Conditions | Symbol | Value | Unit |
|--|-------------------|-------------|------------------|
| Gate-Source Voltage | V_{GSS} | 30 | V |
| Power Dissipation ⁽¹⁾ $T_A = +25^\circ\text{C}$ | P_D | 300 | mW |
| Operating Junction & Storage Temperature Range | T_{op}, T_{stg} | -65 to +200 | $^\circ\text{C}$ |

(1) Derate linearly 1.71 mW/ $^\circ\text{C}$ for $T_A > +25^\circ\text{C}$.

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

| Parameters / Test Conditions | Symbol | Min. | Max. | Unit |
|---|---------------|-------|------------|-----------------|
| Gate-Source Breakdown Voltage $V_{DS} = 0, I_G = 1.0\mu\text{A}$ dc | $V_{(BR)GSS}$ | 30 | | Vdc |
| Gate Reverse Current $V_{DS} = 0, V_{GS} = 30\text{V}$ dc $V_{DS} = 0, V_{GS} = 15\text{V}$ dc | I_{GSS} | | 30 22.5 | ηA |
| Drain Current $V_{GS} = 0\text{V}$ dc, $V_{DS} = 5.0\text{V}$ dc | I_{DSS} | -2.0 | -10.0 | mA |
| Gate-Source Cutoff Voltage $V_{DS} = 5.0\text{V}, I_D = 1.0\mu\text{A}$ dc | $V_{GS(off)}$ | 0.75 | 6.0 | Vdc |
| Magnitude of Small-Signal, Common-Source Short-Circuit Forward Transfer Admittance $V_{GS} = 0, V_{DS} = 5.0\text{V}$ dc, $f = 1.0\text{kHz}$ | $ Y_{fs2} $ | 2,000 | 6,250 | μmho |
| Small-Signal, Common-Source Short-Circuit Input Capacitance $V_{GS} = 0, V_{DS} = 5.0\text{V}$ dc, $f = 1.0\text{MHz}$ | C_{iss} | | 10 | pF |
| Common-Source Spot Noise Figure $V_{GS} = 0, V_{DS} = 5.0\text{V}$ dc, $f = 1.0\text{kHz}$ $B_w = 16\%, R_G = 1.0$ megohms $e_{gen} = 1.82\text{mV}$ dc, $R_L = 220\Omega$ | NF | | 3.0 | dB |



TO-18
(TO-206AA)