

## P-CHANNEL J-FET

Equivalent To MIL-PRF-19500/295

### DEVICES

2N2608

### LEVELS

MQ = JAN Equivalent

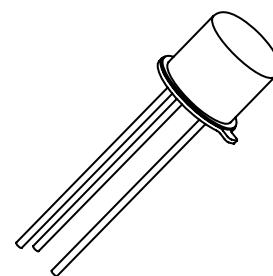
### ABSOLUTE MAXIMUM RATINGS ( $T_C = +25^\circ\text{C}$ unless otherwise noted)

| Parameters / Test Conditions                                  | Symbol            | Value       | Unit             |
|---------------------------------------------------------------|-------------------|-------------|------------------|
| Gate-Source Voltage                                           | $V_{GSS}$         | 30          | V                |
| Power Dissipation <sup>(1)</sup><br>$T_A = +25^\circ\text{C}$ | $P_D$             | 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<br>$V_{DS} = 0, I_G = 1.0\mu\text{A dc}$                                                                                                                 | $V_{(BR)GSS}$ | 30    |           | Vdc             |
| Gate Reverse Current<br>$V_{DS} = 0, V_{GS} = 30\text{V dc}$<br>$V_{DS} = 0, V_{GS} = 15\text{V dc}$                                                                                   | $I_{GSS}$     |       | 10<br>7.5 | $\eta\text{A}$  |
| Drain Current<br>$V_{GS} = 0\text{V dc}, V_{DS} = 5.0\text{V dc}$                                                                                                                      | $I_{DSS}$     | -1.0  | -5.0      | mA              |
| Gate-Source Cutoff Voltage<br>$V_{DS} = 5.0\text{V}, I_D = 1.0\mu\text{A dc}$                                                                                                          | $V_{GS(off)}$ | 0.75  | 6.0       | Vdc             |
| Magnitude of Small-Signal, Common-Source Short-Circuit Forward Transfer Admittance<br>$V_{GS} = 0, V_{DS} = 5.0\text{V dc}, f = 1.0\text{kHz}$                                         | $ Y_{fs2} $   | 1,000 | 4,500     | $\mu\text{mho}$ |
| Small-Signal, Common-Source Short-Circuit Input Capacitance<br>$V_{GS} = 0, V_{DS} = 5.0\text{V dc}, f = 1.0\text{MHz}$                                                                | $C_{iss}$     |       | 10        | pF              |
| Common-Source Spot Noise Figure<br>$V_{GS} = 0, V_{DS} = 5.0\text{V dc}, f = 1.0\text{kHz}$<br>$B_W = 16\%, R_G = 1.0\text{ megohms}$<br>$e_{gen} = 1.82\text{mV dc}, R_L = 470\Omega$ | NF            |       | 3.0       | dB              |



TO-18  
(TO-206AA)