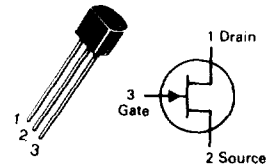


J300

CASE 29-04, STYLE 5
TO-92 (TO-226AA)



JFET
HIGH FREQUENCY AMPLIFIER

N-CHANNEL — DEPLETION

MAXIMUM RATINGS

| Rating | Symbol | Value | Unit |
|--|-----------|-------------|----------------------------|
| Drain-Gate Voltage | V_{DG} | -25 | Vdc |
| Gate Current | I_G | 10 | mA |
| Total Device Dissipation (at $T_A = 25^\circ\text{C}$ Derate above 25°C) | P_D | 350 2.8 | mW mW/ $^\circ\text{C}$ |
| Lead Temperature (1/16" from Case for 10 Seconds) | T_L | 300 | $^\circ\text{C}$ |
| Junction Temperature Range | T_J | -65 to +150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | -65 to +150 | $^\circ\text{C}$ |

Refer to 2N5484 for graphs.

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

| Characteristic | Symbol | Min | Max | Unit |
|--|---------------|------|------|------------------|
| OFF CHARACTERISTICS | | | | |
| Gate-Source Breakdown Voltage ($I_G = -1.0 \mu\text{A}$, $V_{DS} = 0$) | $V_{(BR)GSS}$ | -25 | — | Vdc |
| Gate Reverse Current ($V_{GS} = -15 \text{ V}$, $V_{DS} = 0$) | I_{GSS} | — | 500 | pA |
| Gate Source Cutoff Voltage ($V_{DS} = 10 \text{ V}$, $I_D = 1.0 \text{ mA}$) | $V_{GS(off)}$ | -1.0 | -6.0 | Vdc |
| ON CHARACTERISTICS | | | | |
| Zero-Gate-Voltage Drain Current ($V_{DS} = 10 \text{ V}$, $V_{GS} = 0$) | I_{DSS} | 6.0 | 30 | mA |
| Gate-Source Forward Voltage ($V_{DS} = 0$, $I_G = 1.0 \text{ mA}$) | $V_{GS(f)}$ | — | 1.0 | Vdc |
| SMALL-SIGNAL CHARACTERISTICS | | | | |
| Forward Transfer Admittance ($V_{DS} = 10 \text{ V}$, $I_D = 5.0 \text{ mA}$, $f = 1.0 \text{ kHz}$) | $ y_{fs} $ | 4500 | 9000 | μmhos |
| Output Admittance ($V_{DS} = 10 \text{ V}$, $I_D = 5.0 \text{ mA}$, $f = 1.0 \text{ kHz}$) | $ y_{os} $ | — | 200 | μmhos |
| Input Capacitance ($V_{DS} = 10 \text{ V}$, $I_D = 5.0 \text{ mA}$, $f = 1.0 \text{ MHz}$) | C_{iss} | — | 5.5 | pF |
| Reverse Transfer Capacitance ($V_{DS} = 10 \text{ V}$, $I_D = 5.0 \text{ mA}$, $f = 1.0 \text{ MHz}$) | C_{rss} | — | 1.7 | pF |