

ALL DIMENSIONS IN MILLIMETERS

### n-channel JFET designed for . . .

- VHF/UHF Amplifiers
- Oscillators
- Mixers
- Low Input Capacitance High Speed Switch



**BENEFITS:**

- Low Noise  
NF = 3 dB Typical @ 400 MHz
- Wideband  
High  $g_{fs}/C_{iss}$  Ratio

**TYPE            PACKAGE**

Single            TO-72  
Single            TO-92

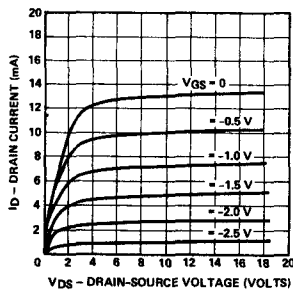
**PRINCIPAL DEVICES**

2N3966, 2N4416-16A  
2N5484-6, 2N5555, 2N5668-70, MPF102, MPF108,  
MPF112, PN4416,  
J304-5, U1837, U1994  
KK4416-18, K304-18, KK305-18, K1837-18  
All of the above devices

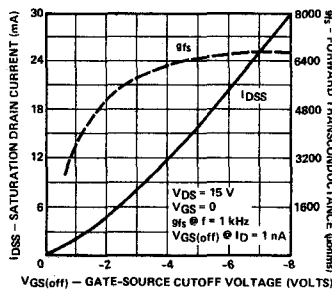
Single            TO-92 Lead-form  
Single            Chip

**PERFORMANCE CURVES (25°C unless otherwise noted)**

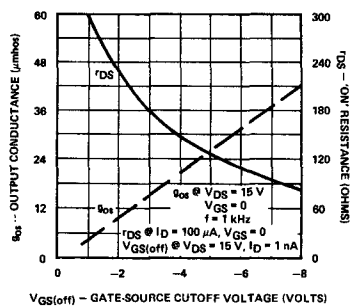
**Output Characteristic**



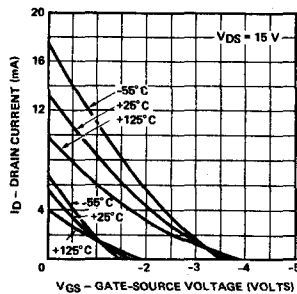
**Drain Current & Transconductance vs Gate-Source Voltage**



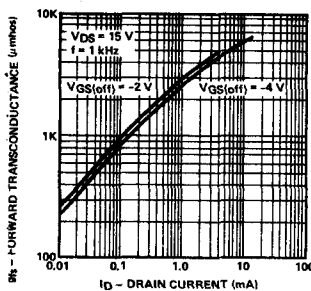
**'ON' Resistance & Output Conductance vs Gate-Source Cutoff Voltage**



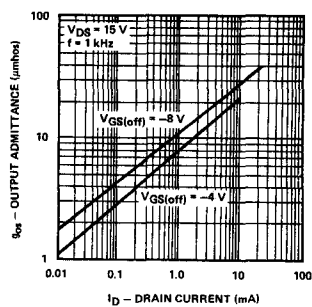
**Transfer Characteristics**



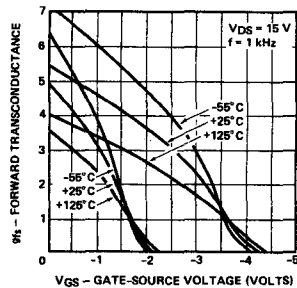
**Common-Source Forward Transconductance vs Drain Current**



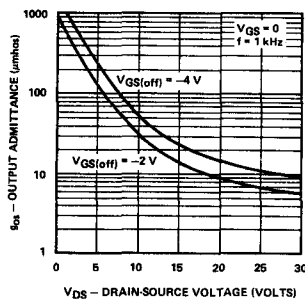
**Common-Source Output Conductance vs Drain Current**



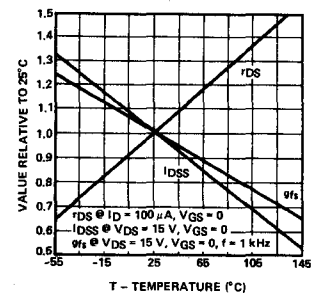
**Transconductance Characteristics**



**Common-Source Output Conductance vs Drain-Source Voltage**

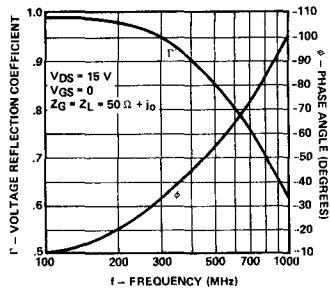


**Drain Current, Transconductance and 'ON' Resistance vs Ambient Temperature**

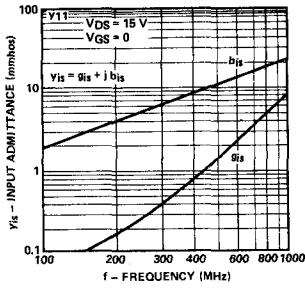


PERFORMANCE CURVES (Cont'd) (25°C unless otherwise noted)

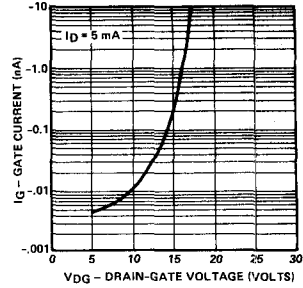
S Parameters S<sub>11</sub> Common-Source vs Frequency



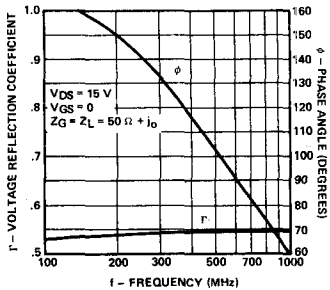
Common-Source Input Admittance vs Frequency



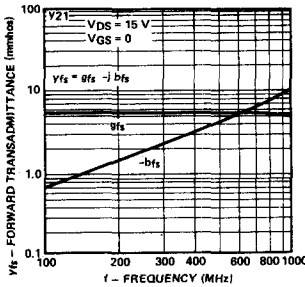
Gate Operating Current vs Drain-Gate Voltage



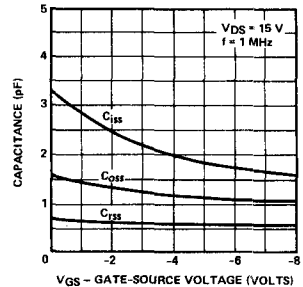
S Parameters S<sub>21</sub> Common-Source vs Frequency



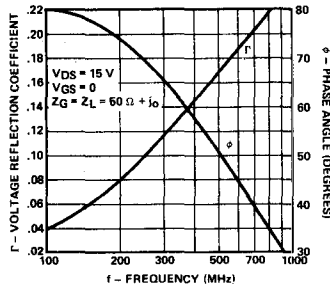
Common-Source Forward Transadmittance vs Frequency



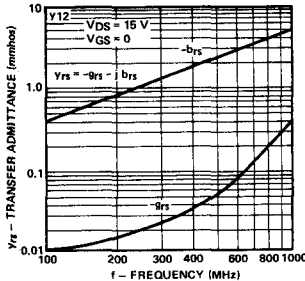
Common-Source Capacitances vs Gate-Source Voltage



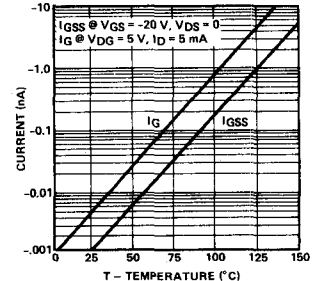
S Parameters S<sub>12</sub> Common-Source vs Frequency



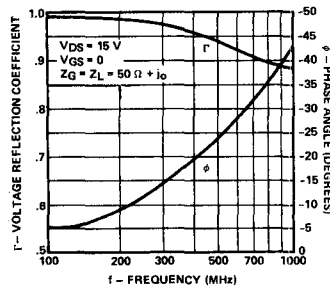
Common-Source Reverse Transfer Admittance vs Frequency



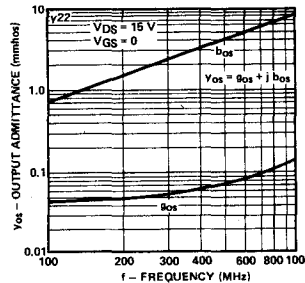
Gate Current vs Ambient Temperature



S Parameters S<sub>22</sub> Common-Source vs Frequency



Common-Source Output Admittance vs Frequency



Equivalent Input Noise Voltage vs Frequency

