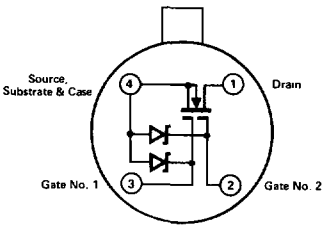
FEATURES

- Positive bias only
- Low gate voltage
- Enhancement mode operation
- Wide AGC range - 50dB at 200MHz
- Zener diode gate protection
- Ion implanted for greater reliability
- High conversion gain - 17dB at 200MHz with VG1S = VG2S for biasing simplicity
- Excellent isolation from gate no. 1 (RF) to gate no. 2 (LO) - 20dB at 200MHz
- Low input capacitance - 4.0pF
- Low feedback capacitance - 0.03pF
- Excellent cross modulation performance and low noise operation
- High transconductance - 27mmhos

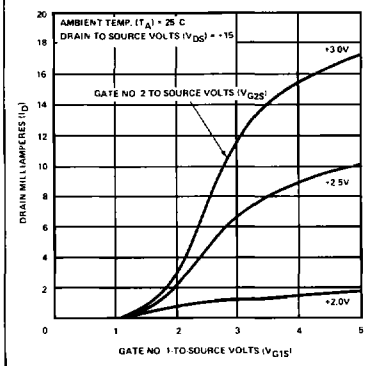
PIN CONFIGURATION

PACKAGE

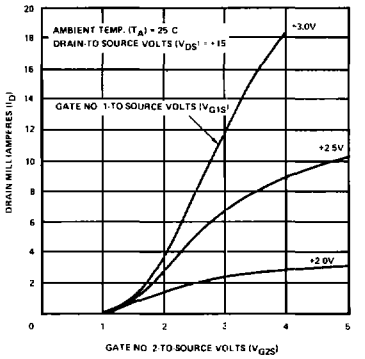


CHARACTERISTIC CURVES

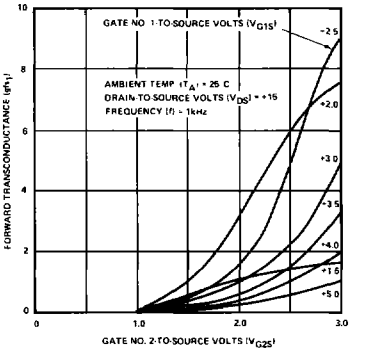
DRAIN CURRENT VS GATE NO. 1-TO-SOURCE VOLTAGE



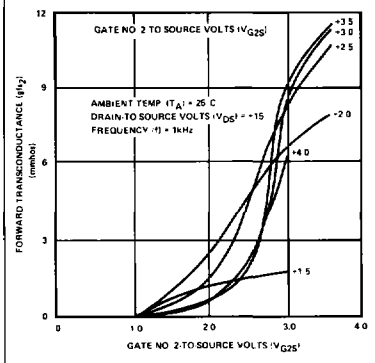
DRAIN CURRENT VS GATE NO. 2-TO-SOURCE VOLTAGE



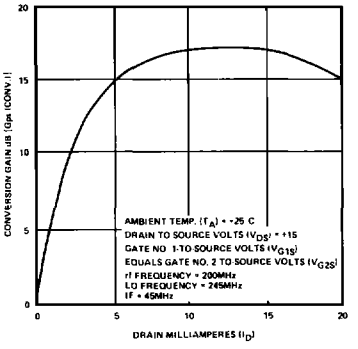
GATE NO. 1 FORWARD TRANSCONDUCTANCE VS GATE NO. 2-TO-SOURCE VOLTAGE



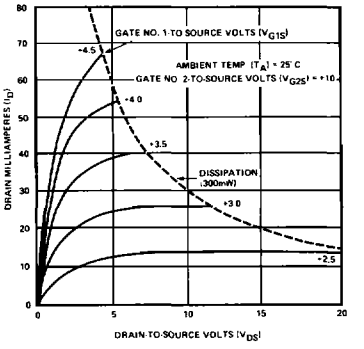
GATE NO. 2 FORWARD TRANSCONDUCTANCE VS GATE NO. 1-TO-SOURCE VOLTAGE



CONVERSION GAIN VS DRAIN CURRENT

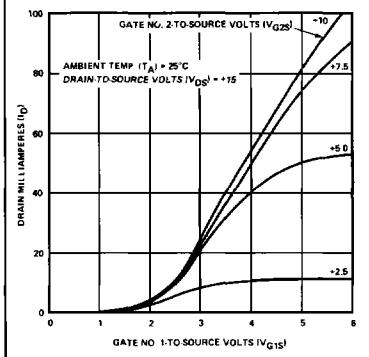


DRAIN CURRENT VS DRAIN-TO-SOURCE VOLTAGE

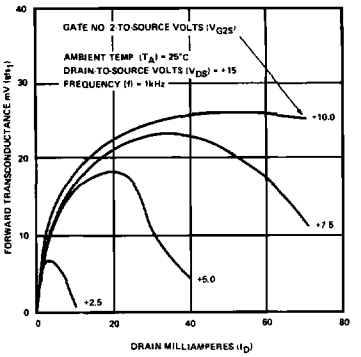


CHARACTERISTIC CURVES (Continued)

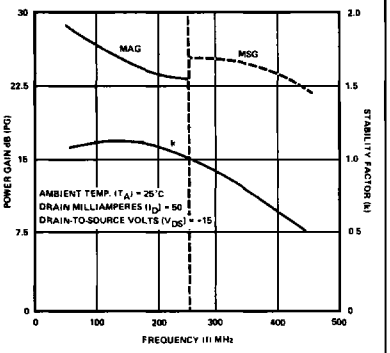
DRAIN CURRENT VS GATE NO. 1-TO-SOURCE VOLTAGE



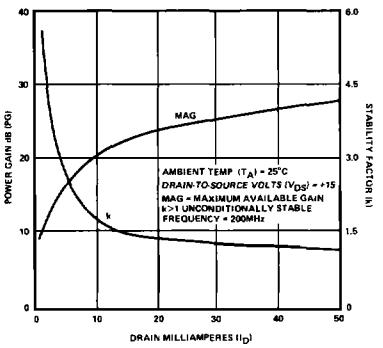
GATE NO. 1 FORWARD TRANSCONDUCTANCE VS DRAIN CURRENT



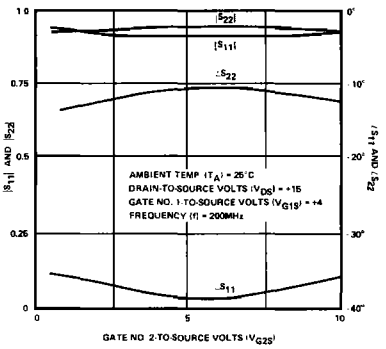
POWER GAIN VS FREQUENCY



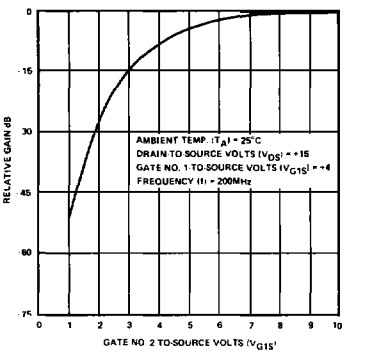
POWER GAIN VS DRAIN CURRENT



AUTOMATIC GAIN CONTROL VS S_{11} AND S_{22}



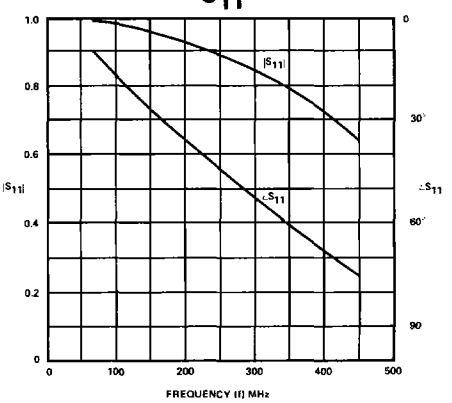
AUTOMATIC GAIN CONTROL RANGE



S PARAMETERS

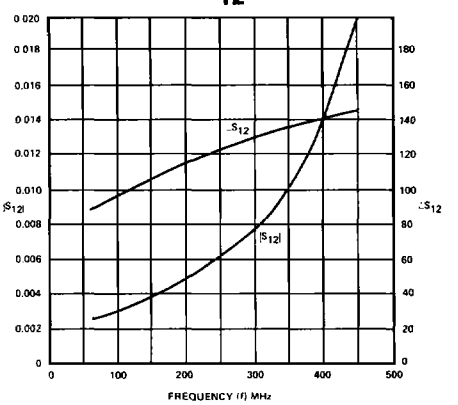
AMBIENT TEMP. (T_A) = +25°C
DRAIN-TO-SOURCE VOLTS (V_{DS}) = +15

S_{11}



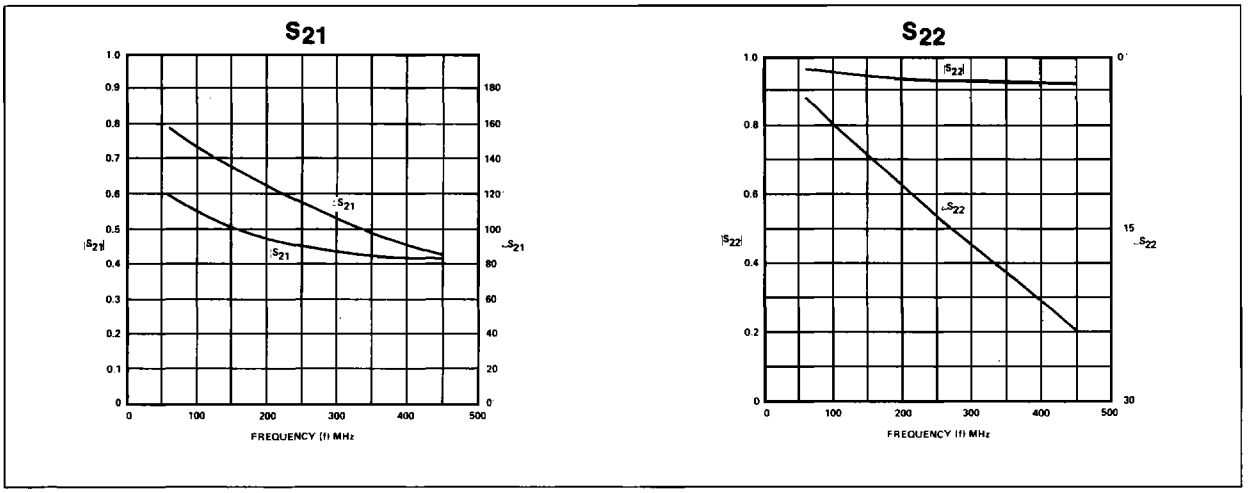
DRAIN MILLIAMPERES (I_D) = 8
GATE NO. 1-TO-SOURCE VOLTS = GATE NO. 2-TO-SOURCE VOLTS

S_{12}



ANALOG

CHARACTERISTIC CURVES (Continued)



200MHz/45MHz MIXER TEST CIRCUIT