n-channel JFETs *designed for . . .*

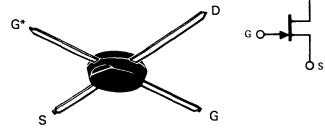
■ UHF Amplifiers

Performance Curves NZF
See Section 4

BENEFITS

- High Power Gain
  10 dB Typical at 450 MHz
- Low Noise
  3.4 dB Typical at 450 MHz
- Low Intermodulation Distortion
- Hermetic Stripline Package

OD-84
See Section 5



Note: G* is back Gate contact.

ABSOLUTE MAXIMUM RATINGS (25°C)

Gate-Drain or Gate-Source Voltage . . . . . -25 V
Gate Current . . . . . 10 mA
Total Device Dissipation (Derate 1.0 mW/°C) . . . . . 175 mW
Storage Temperature Range . . . . . -65 to +200°C
Operating Temperature Range . . . . . -65 to +200°C
Lead Temperature
(1/16" from case for 10 seconds) . . . . . .300°C

ELECTRICAL CHARACTERISTICS (25°C unless otherwise noted)

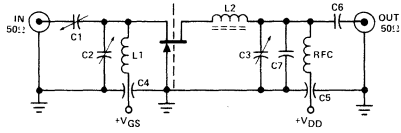
		Characteristic		Min	Max	Unit	Test Conditions	
1	STATIC	I_{GSS}	Gate Reverse Current		-1	nA	V_{GS} = -15 V, V_{DS} = 0	
2					-1	μA		150°C
3		BV_{GSS}	Gate-Source Breakdown Voltage	-25		V	I_G = -1 μA, V_{DS} = 0	
4		$V_{GS(off)}$	Gate-Source Cutoff Voltage	-1	-6		V_{DS} = 10 V, I_D = 1 nA	
5		I_{DSS}	Saturation Drain Current (Note 1)	10	30	mA	V_{DS} = 10 V, V_{GS} = 0	
6	DYNAMIC	g_{fs}	Common-Source Forward Transconductance	6000	10,000	μmho	V_{DS} = 10 V, I_D = 10 mA	f = 1 kHz
7		g_{os}	Common-Source Output Conductance		200			
8		C_{iss}	Common-Source Input Capacitance		5	pF		f = 1 MHz
9		C_{rss}	Common-Source Reverse Transfer Capacitance		1.2			

NOTE:
1. Pulse test duration = 2 ms.

NZF

3

450 MHz Gain and Noise Figure Test Circuit for J315



C1 2.5-11 ERIE N650
C2, C3 .8-10pF JFD MVM010W
C4, C5 1000pF AB FASC
C6 100pF
C7 10pF
L1 17 r hy 3/4" 28 AWG
L2 100nhy, 2T 1/4 OD #18 AWG
RFC .33 hy Miller 9230-30