n-channel JFET *designed for . . .*

- **VHF/UHF Common-Gate Amplifiers**
- **Mixers**

Performance Curves NZF See Section 4

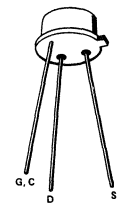
BENEFITS

- High Power Gain
  10 dB Typical at 450 MHz, Common Gate
- Low Noise
  NF = 3.5 dB Typical at 450 MHz

ABSOLUTE MAXIMUM RATINGS (25°C)

Gate-Drain or Gate-Source Voltage . . . . . -25 V
Gate Current . . . . . 10 mA
Total Power Dissipation at or below 25°C
Free-Air Temperature . . . . . 500 mW
Power Derating . . . . . 4.0 mW/°C
Operating Temperature Range . . . . . -65 to +150°C
Storage Temperature Range . . . . . -65 to +150°C
Lead Temperature
(1/16" from case for 10 seconds) . . . . . .300°C

TO-52
See Section 5



ELECTRICAL CHARACTERISTICS (25°C unless otherwise noted)

		Characteristic		Min	Max	Unit	Test Conditions	
1	STATIC	I_{GSS}	Gate Reverse Current		-0.1	nA	V_{GS} = -15 V, V_{DS} = 0	
2					-0.1	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	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	DYN	g_{fg}	Common-Gate Forward Transconductance (Note 1)	6000	10,000	μmho	V_{DS} = 10 V, I_D = 10 mA	f = 1 kHz
7		g_{og}	Common-Gate Output Conductance		200	μmho		
8		C_{gd}	Gate-Drain Capacitance		1.2	pF	V_{DG} = 10 V, I_D = 10 mA	f = 1 MHz
9		C_{gs}	Gate-Source Capacitance		3.8	pF		

NOTE:
1. Pulse test duration = 2 ms.

NZF