

J300

**n-channel JFETs
 designed for . . .**

- VHF/UHF Amplifiers
- Oscillators
- Mixers

Performance Curves NZF

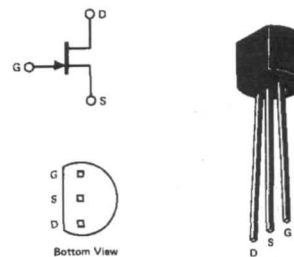
BENEFITS

- High Power Gain
 20–23 dB Typical at 100 MHz,
 Common-Source
 17.5–20.5 dB Typical at 100 MHz,
 Common-Gate
- Low Noise Figure
 1.3 dB Typical at 100 MHz
- High Dynamic Range
 Greater than 100 dB

ABSOLUTE MAXIMUM RATINGS (25°C)

Gate-Drain or Gate-Source Voltage	-25 V
Gate Current	10 mA
Total Device Dissipation at 25°C Ambient (Derate 3.27 mW/°C)	360 mW
Operating Temperature Range	-55 to 135°C
Storage Temperature Range	-55 to 150°C
Lead Temperature Range (1/16" from case for 10 seconds)	300°C

TO-92
 See Section 7



ELECTRICAL CHARACTERISTICS (25°C unless otherwise specified)

		Characteristic	Min	Max	Unit	Test Conditions
1 2 3 4 5 6 7 8 9	S T A T I C	I _{GSS} Gate Reverse Current		-0.5	nA	V _{GS} = -15 V, V _{DS} = 0 T _A = 125°C
				-0.1	μA	
		BV _{GSS} Gate-Source Breakdown Voltage	-25		V	I _G = -1 μA, V _{DS} = 0
		V _{GS(off)} Gate-Source Cutoff Voltage (Note 1)	-1.5	-7.0		V _{DS} = 10 V, I _D = 1 nA
		I _{DSS} Saturation Drain Current (Note 1, 2)	4	45	mA	V _{DS} = 10 V, V _{GS} = 0
	D Y N A M I C	g _{fs} Common-Source Forward Transconductance (Note 1)	4500	9000	μmho	V _{DS} = 10 V, I _D = 5 mA, f = 1 kHz
		g _{os} Common-Source Output Conductance		200		
		C _{rss} Common-Source Reverse Transfer Capacitance		1.7	pF	V _{DG} = 10 V, I _D = 5 mA, f = 1 MHz
		C _{iss} Common-Source Input Capacitance		5.5		

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