

n-channel JFETs designed for . . .



J316 J317

Performance Curves NZA See Section 4

- VHF Amplifiers
- Oscillators
- Mixers

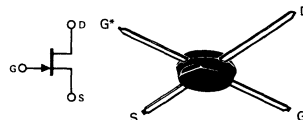
BENEFITS

- Hermetic Strip Line Package
- High Power Gain
16 dB Typical at 105 MHz,
Common-Gate
11 dB Typical at 450 MHz,
Common-Gate
- Low Noise Figure
1.5 dB Typical at 105 MHz
2.7 dB Typical at 450 MHz
- Wide Dynamic Range—Greater than
100 dB
- Worst Case Input Power Match (75 Ω)
VSWR 1.25:1

ABSOLUTE MAXIMUM RATINGS (25°C)

Gate-Drain or Gate-Source Voltage	.....	-25 V
Gate Current	.....	20 mA
Total Device Dissipation	.....	175 mW
Derate	.....	1 mW/°C
Surface Temperature Range	.....	-65°C to +200°C
Lead Temperature 1/16 From Case (max 10 Sec)	.....	300°C

OD-84
See Section 5



Note: G* is back Gate contact.

ELECTRICAL CHARACTERISTICS (25°C unless otherwise noted)

1	2	3	4	5	6	7	8	9	10	Characteristic	J316				J317				Unit	Test Conditions		
											Min	Max	Min	Max	Min	Max	Min	Max		Min	Max	Min
	S T A T I C	IGSS	Gate Reverse Current			-1		-1	nA	VGS = -15 V, VDS = 0												
		BVGS	Gate Source Breakdown Volt.	-25		-25		-1		μA												T = 125°C
		VGS(off)	Gate-Source Cutoff Voltage	-1	-4	-2.5	-6		V	IG = -1 μA, VDS = 0												
		VGS(f)	Gate-Source Forward Voltage			1		1		VDS = 10 V, ID = 1 nA												
		IDSS	Saturation Drain Current	12	30	24	60		mA	IG = 10 mA, VDS = 0												
	D Y N	gfg	Common-Gate Forward Transconductance	10	20	10	18		m mho	VDS = 10 V, ID = 10 mA											f = 1 kHz (Note 1)	
		gog	Common-Gate Output Conductance		150		150			μ mho												
		Cgd	Gate-Drain Capacitance		3		3		pF	VDS = 10 V												f = 1 MHz
		Cgs	Gate-Source Capacitance		3		3			VGS = -10 V												

NZA

NOTE:
1 Pulsed (test duration 2 mS)

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