n-channel JFETs *designed for . . .*

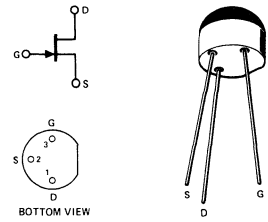
- **VHF/UHF Amplifiers**
- **Oscillators**
- **Mixers**

Performance Curves NH
See Section 4

BENEFITS

- Selected I_{DSS} and V_{GS} Ranges
- Low C_{rss} 0.75 pF Typical
- High Y_{fs}/C_{iss} Ratio
- High Dynamic Range Greater than 100 dB

TO-106
See Section 5



ABSOLUTE MAXIMUM RATINGS (25°C)

Gate-Drain or Gate-Source Voltage . . . . . 30 V
Gate Current . . . . . 10 mA
Total Device Dissipation (Derate at 2.5 mW/°C) . . . . 350 mW
Operating Temperature . . . . . −65 to +125°C
Storage Temperature . . . . . −65 to +125°C

ELECTRICAL CHARACTERISTICS (25°C unless otherwise specified)

		Characteristic		Min	Typ	Max	Units	Test Conditions
1		I_{GSS} Gate Reverse Current				−5	nA	V_{GS} = −20 V, V_{DS} = 0
2		BV_{GSS} Gate-Source Breakdown Voltage		−30			V	I_G = −1 μA, V_{DS} = 0
3		$V_{GS(off)}$ Gate-Source Cutoff Voltage		−0.5		−8	V	V_{DS} = 15 V, I_D = 10 μA
4	STATIC	I_{DSS} Saturation Drain Current (Note 1)		2		25	mA	V_{DS} = 15 V, V_{GS} = 0
5		I_{DSS} Saturation Drain Current (Note 1)	W245A	2		6.5	mA	V_{DS} = 15 V, V_{GS} = 0
6			W245B	6		15	mA	
7			W245C	12		25	mA	
8		V_{GS} Gate-Source Voltage (Note 1)	W245A	−0.4		−2.2	V	I_D = 200 μA, V_{DG} = 15 V
9			W245B	−1.6		−3.8	V	
10			W245C	−3.2		−7.5	V	
11		g_{fs} Common-Source Forward Transconductance		3	5.5	6.5	mmho	V_{DS} = 15 V, V_{GS} = 0, f = 1 kHz
12	DYN	C_{rss} Common-Source Reverse Transfer Capacitance			0.75		pF	V_{DS} = 20 V, V_{GS} = −1 V, f = 1 MHz
13		C_{iss} Common-Source Input Capacitance			3.5		pF	V_{DS} = 20 V, V_{GS} = −1 V, f = 1 MHz
14		C_{oss} Output Capacitance			1.6		pF	V_{DS} = 20 V, V_{GS} = −1 V, f = 1 MHz

NOTE:
1. Pulse test PW ≤ 300 μs, duty cycle ≤ 2%.

NH