n-channel JFET
designed for . . .

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

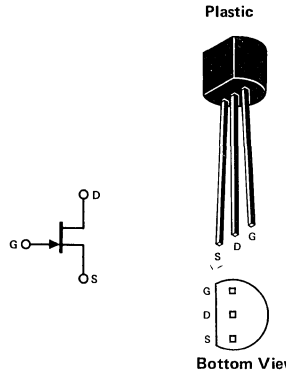
Siliconix

Performance Curves NH/NRL See Section 4

BENEFITS
- Low Cost
- Automatic Insertion Package

TO-92
See Section 6

Plastic



Bottom View

ABSOLUTE MAXIMUM RATINGS (25°C)

Drain-Gate Voltage . . . . . 25 V
Source-Gate Voltage . . . . . 25 V
Drain-Source Voltage. . . . . 25 V
Forward 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

ELECTRICAL CHARACTERISTICS (25°C unless otherwise noted)

		Characteristic		Min	Max	Unit	Test Conditions	
1	STATIC	I_{GSS}	Gate Reverse Current		–1.0	nA	V_{GS} = –15 V, V_{DS} = 0	
2					–1.0	μA		T_A = +100°C
3		BV_{GSS}	Gate-Source Breakdown Voltage	–25		V	i_G = –10 μA, V_{DS} = 0	
4		$V_{GS(off)}$	Gate-Source Cutoff Voltage	–0.5	–8.0		V_{DS} = 15 V, I_D = 10 μA	
5		I_{DSS}	Saturation Drain Current	1.5	24	mA	V_{DS} = 15 V, V_{GS} = 0 (Note 1)	
6	DYNAMIC	g_{fs}	Common-Source Forward Transconductance	2000	7500	μmhos	V_{DS} = 15 V, V_{GS} = 0	f = 1 kHz
7		g_{os}	Common-Source Output Conductance		75			
8		$Re(y_{fs})$	Common-Source Forward Transconductance	1600				f = 100 MHz
9		$Re(y_{os})$	Common-Source Output Conductance		200			
10		$Re(y_{is})$	Common-Source Input Conductance		800			
11		C_{iss}	Common-Source Input Capacitance		6.5	pF		f = 1 MHz
12		C_{rss}	Common-Source Reverse Transfer Capacitance		2.5			
13		NF	Noise Figure		2.5	dB	V_{DS} = 15 V, V_{GS} = 0, R_G = 1M Ω	f = 1 kHz
14					3.0		V_{DS} = 15 V, V_{GS} = 0, R_G = 1K Ω	f = 100 MHz

NOTE: NH/NRL
1. Pulse test, pulse width = 300 μs, duty cycle ≤ 3%.