n-channel JFETs *designed for . . .*

Siliconix

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

Performance Curves NH
See Section 4

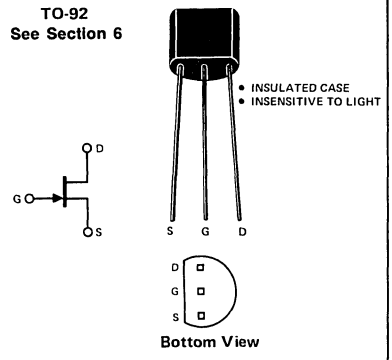
BENEFITS

- Wide Band
  High y_{fs}/C_{iss} Ratio
- Low Feedback Capacitance
  C_{rss} = 0.85 pF Typical
- Selected I_{DSS} and V_{GS} Ranges

ABSOLUTE MAXIMUM RATINGS (25°C)

Drain-Gate Voltage . . . . . 30 V
Drain-Source Voltage . . . . . 30 V
Reverse Gate-Source Voltage . . . . . 30 V
Forward Gate Current . . . . . 10 mA
Continuous Device Dissipation
at (or Below) 25°C Free Air Temperature
(Note 1) . . . . . 200 mW
Storage Temperature Range . . . . . −55°C to +150°C
Lead Temperature
(1/16" from case for 10 seconds) . . . . . 260°C

TO-92
See Section 6



ELECTRICAL CHARACTERISTICS (25°C)

		Characteristic		Min	Typ	Max	Unit	Test Conditions
1	STATIC	BV_{GSS} Gate-Source Breakdown Voltage		−30			V	I_G = −1 μA, V_{DS} = 0
2		I_{GSS} Gate Reverse Current				−5	nA	V_{GS} = −20 V, V_{DS} = 0
3		I_{DSS} Saturation Drain Current		2		25	mA	V_{DS} = 15 V, V_{GS} = 0
4		I_{DSS} Selected into Following Groups (Note 2)	BF244A	2.0		6.5	mA	V_{DS} = 15 V, V_{GS} = 0
5			BF244B	6.0		15	mA	
6			BF244C	12		25	mA	
7		V_{GS} Corresponding to I_{DSS} groups	BF244A	−0.4		−2.2	V	V_{DS} = 15 V, I_D = 200 μA
8			BF244B	−1.6		−3.8	V	
9			BF244C	−3.2		−7.5	V	
10		$V_{GS(off)}$ Gate-Source Cutoff Voltage		−0.5		−8	V	V_{DS} = 15 V, I_D = 10 μA
11	DYNAMIC	g_{fs} Small-Signal Common-Source Forward Transconductance		3	5.5	6.5	mmho	V_{DS} = 15 V, V_{GS} = 0, f = 1 kHz
12		C_{rss} Common-Source Reverse Transfer Capacitance			0.85		pF	V_{DS} = 20 V, V_{GS} = −1 V
13		$\frac{1}{g_{is}}$ Input Resistance			25		kΩ	V_{DS} = 20 V, V_{GS} = −1 V, f = 100 MHz
14					10		kΩ	f = 200 MHz
15		C_{iss} Common-Source Input Capacitance			4		pF	V_{DS} = 20 V, V_{GS} = −1 V
16		C_{oss} Common-Source Output Capacitance			1.6		pF	V_{DS} = 20 V, V_{GS} = −1 V

NOTE:
1. Derate linearly to 125°C free-air temperature at the rate of 2.5 mW/°C.
2. Pulse test PW ≤ 300 μs, duty cycle ≤ 3%.

NH

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