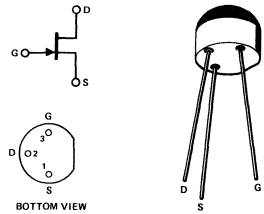
n-channel JFET *designed for . . .*

■ Low and Medium Frequency Amplifiers

BENEFITS

- Low Cost

TO-106
See Section 5



*ABSOLUTE MAXIMUM RATINGS (25°C)

Gate-Drain or Gate-Source Voltage . . . . . –25 V
Gate Current . . . . . 10 mA
Total Device Dissipation
(25°C Free Air Temperature) . . . . . 350 mW
Power Derating (to +125°C) . . . . . 3.5 mW/°C
Storage Temperature Range . . . . . –55 to +125°C
Operating Temperature Range. . . . . –55 to +125°C
Lead Temperature
(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		–10	nA	V_{GS} = –15 V, V_{DS} = 0		
2					–0.6	μA			T_A = 85°C
3		BV_{GSS}	Gate-Source Breakdown Voltage	–25			I_G = –10 μA, V_{DS} = 0		
4		$V_{GS(off)}$	Gate-Source Cutoff Voltage	–0.4	–8.0	V	V_{DS} = 15 V, I_D = 1 μA		
5		V_{GS}	Gate-Source Voltage		–7.5		V_{DS} = 15 V, I_D = 100 μA		
6		I_{DSS}	Saturation Drain Current	1.0	40	mA	V_{DS} = 15 V, V_{GS} = 0		
7	DYNAMIC	$r_{ds(on)}$	Drain-Source ON Resistance		500	Ω	V_{GS} = 0, I_D = 0		
8		g_{fs}	Common-Source Forward Transconductance	2000	9000	μmho	V_{DS} = 15 V, V_{GS} = 0		f = 1 kHz
9		g_{os}	Common-Source Output Conductance		200				
10		g_{fs}	Common-Source Forward Transconductance	1800					f = 1 MHz
11		C_{iss}	Common-Source Input Capacitance		20	pF			
12		C_{rss}	Common-Source Reverse Transfer Capacitance		5.0				
13		NF	Common-Source Spot Noise Figure		3.0	dB	V_{DS} = 15 V, I_D = 1 mA	R_G = 150k Ω	f = 1 kHz NBW = 150 Hz
14		$\overline{e_N}$	Equivalent Short Circuit Input Noise Voltage		50	$\frac{nV}{\sqrt{Hz}}$			

*JEDEC registered data