



2N3921, 2N3922 Monolithic Dual N-Channel JFET

FEATURES

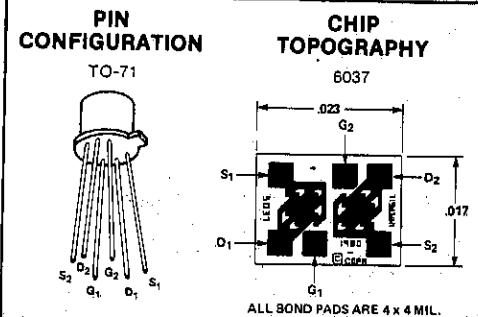
- Low Drain Current
- High Output Impedance
- Matched V_{GS} , ΔV_{GS} , and g_{fs}

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ABSOLUTE MAXIMUM RATINGS

($T_A = 25^\circ\text{C}$ unless otherwise noted)

Gate-Source or Gate-Drain Voltage (Note 1)	-50V
Gate Current (Note 1)	50 mA
Storage Temperature Range	-65°C to +200°C
Operating Temperature Range	-55°C to +150°C
Load Temperature (Soldering, 10 sec.)	+300°C
Power Dissipation	300 mW
Derate above 25°C	1.7 mW/°C



ORDERING INFORMATION*

TO-71	WAFER	DICE
2N3921	2N3921/W	2N3921/D
2N3922	2N3922/W	2N3922/D

*When ordering wafer/dice refer to Appendix B-23.

ELECTRICAL CHARACTERISTICS

TEST CONDITIONS: (25°C unless otherwise noted)

PARAMETER		MIN	MAX	UNIT	TEST CONDITIONS	
I _{GSSR}	Gate Reverse Current		-1	nA		
BV _{DGO}	Drain-Gate Breakdown Voltage		50			
V _{GS(off)}	Gate-Source Cutoff Voltage		-3	V		
V _{GS}	Gate-Source Voltage	-0.2	-2.7			
I _G	Gate Operating Current		-250	pA		
I _{DSS}	Saturation Drain Current (Note 1)	1	10	mA		
g _{fs}	Common-Source Forward Transconductance (Note 2)	1500	7500	μmho		
g _{os}	Common-Source Output Conductance		35			
C _{iss}	Common-Source Input Capacitance		18	pF		
C _{rss}	Common-Source Reverse Transfer Capacitance		6			
g _{fs}	Common-Source Forward Transconductance	1500		μmho		
g _{oss}	Common-Source Output Conductance		20		V _{DG} = 10V, I _D = 700 μA	f = 1 kHz
NF	Spot Noise Figure		2	dB	V _{DG} = 10V, V _{GS} = 0	f = 1 kHz, R _G = 1 meg

MATCHING CHARACTERISTICS		2N3921		2N3922		TEST CONDITIONS
		MIN	MAX	MIN	MAX	
V _{GS1} -V _{GS2}	Differential Gate-Source Voltage		5		5	mV
Δ V _{GS1} -V _{GS2}	Gate-Source Differential Voltage Change with Temperature		10		25	μV/°C
AT						TA = 0°C, TB = 100°C
g _{fs2}	Transconductance Ratio	0.95	1.0	0.95	1.0	f = 1 kHz

NOTES: 1. Per transistor.

2. Pulse test duration = 2 ms.