

B-32

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IF1331

N-Channel Silicon Junction Field-Effect Transistor

• Low-Noise, High Gain Amplifier

Absolute maximum ratings at T_A = 25 °C

Reverse Gate Source & Reverse Gate Drain Voltage	– 20 V
Continuous Forward Gate Current	10 mA
Continuous Device Power Dissipation	225 mW
Power Derating	1.8 mW/°C
Storage Temperature Range	– 65°C to 200°C

At 25°C free air temperature: Static Electrical Characteristics		IF1331		Process NJ132H		
		Min	Max	Unit	Test Conditions	
Gate Source Breakdown Voltage	V _{(BR)GSS}	– 20		V	I _G = – 1 µA, V _{DS} = ∅V	
Gate Reverse Current	I _{GSS}		– 0.1	nA	V _{DS} = ∅V, V _{GS} = – 10V	
Gate Source Cutoff Voltage	V _{GS(OFF)}	– 0.35	– 1.5	V	V _{DS} = 10V, I _D = 0.5 nA	
Drain Saturation Current (Pulsed)	I _{DSS}	5	20	mA	V _{DS} = 10V, V _{GS} = ∅V	
Dynamic Electrical Characteristics						
Common Source Forward Transconductance	g _{fs}	10		mS	V _{DS} = 10V, I _D = 5 mA	f = 1 kHz
Common Source Input Capacitance	C _{iss}		20	pF	V _{DS} = 10V, I _D = 5 mA	f = 1 MHz
Common Source Reverse Transfer Capacitance	C _{rss}		5	pF	V _{DS} = 10V, I _D = 5 mA	f = 1 MHz
Typ						
Equivalent Short Circuit Input Noise Voltage	e _N	2.5		nV/√Hz	V _{DS} = 10V, I _D = 5 mA	f = 1 kHz

TO-72 Package

Dimensions in Inches (mm)

Pin Configuration

1 Source, 2 Drain, 3 Gate, 4 Case



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