

B-36

01/99

IF4500

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		IF4500		Process NJ450L		
		Min	Max	Unit	Test Conditions	
Gate Source Breakdown Voltage	V _{(BR)GSS}	– 20		V	I _G = – 1 µA, V _{DS} = ØV	
Gate Reverse Current	I _{GSS}		– 0.1	nA	V _{GS} = – 30V, V _{DS} = ØV	
Gate Source Cutoff Voltage	V _{GS(OFF)}	– 0.35	– 1.5	V	V _{DS} = 15V, I _D = 0.5 nA	
Drain Saturation Current (Pulsed)	I _{DSS}	5		mA	V _{DS} = 15V, V _{GS} = ØV	
Dynamic Electrical Characteristics						
Common Source Forward Transconductance	g _{fs}	15		mS	V _{DS} = 15V, I _D = 5 mA	f = 1 kHz
Common Source Input Capacitance	C _{iss}		35	pF	V _{DS} = 15V, V _{GS} = ØV	f = 1 MHz
Common Source Reverse Transfer Capacitance	C _{rss}		8	pF	V _{DS} = 15V, V _{GS} = ØV	f = 1 MHz
Typ						
Equivalent Short Circuit Input Noise Voltage	e _N	1.5		nV/√Hz	V _{DS} = 12V, V _{GS} = ØV	f = 1 kHz

TO-236AB Package
Dimensions in Inches (mm)

Pin Configuration
1 Drain, 2 Source, 3 Gate

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