

NJ450L Process

Silicon Junction Field-Effect Transistor

- Low-Current
- Low Gate Leakage Current
- High Input Impedance

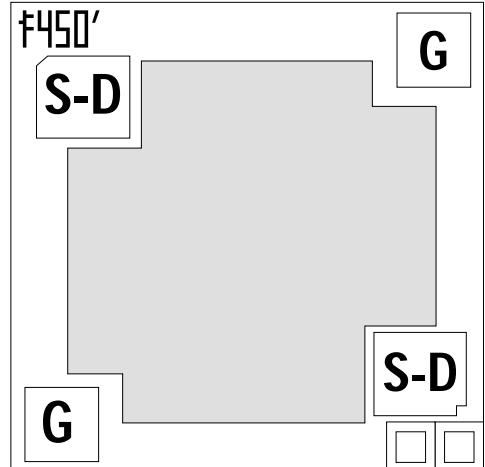
Absolute maximum ratings at 25 °C free-air temperature.

Gate Current, Ig 10 mA
 Operating Junction Temperature, T_j +150°C
 Storage Temperature, T_s – 65°C to +175°C

Devices in this Databook based on the NJ450L Process.

Datasheet

2N6550
 IF4500
 IF4501
 IFN860



Die Size = 0.028" X 0.028"
 All Bond Pads = 0.004" Sq.
 Substrate is also Gate.

At 25°C free air temperature:

Static Electrical Characteristics

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	Min	Typ	Max	Unit	Test Conditions	
Gate Source Breakdown Voltage	V _{(BR)GSS}	– 25	– 25		V	I _G = – 1 μA, V _{DS} = ØV
Reverse Gate Leakage Current	I _{GSS}		– 50		pA	V _{GS} = – 15V, V _{DS} = ØV
Drain Saturation Current (Pulsed)	I _{DSS}	5			mA	V _{DS} = 15V, V _{GS} = ØV
Gate Source Cutoff Voltage	V _{GS(OFF)}	– 0.1		– 4	V	V _{DS} = 15V, I _D = 1 nA

Dynamic Electrical Characteristics

Forward Transconductance (Pulsed)	g _{fs}		100		mS	V _{DS} = 15V, V _{GS} = ØV	f = 1 kHz
Input Capacitance	C _{iss}		35		pF	V _{DS} = ØV, V _{GS} = – 10V	f = 1 MHz
Feedback Capacitance	C _{rss}		10		pF	V _{DS} = ØV, V _{GS} = – 10V	f = 1 MHz
Equivalent Noise Voltage	ē _N		0.9		nV/√Hz	V _{DG} = 4V, I _D = 5 mA	f = 1 kHz

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