NJ36D Process

Silicon Junction Field-Effect Transistor

- Monolithic Dual Construction
- High Frequency Amplifier
- Low-Noise Amplifier

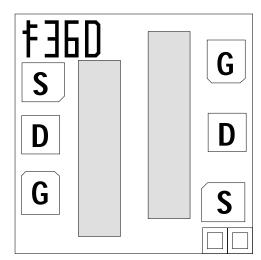
Absolute maximum ratings at TA = 25 °C

Gate Current, Ig10 mAOperating Junction Temperature, Tj+150°CStorage Temperature, Ts- 65°C to +175°C

Devices in this Databook based on the NJ36D Process.

Datasheet

2N5911, 2N5912 IFN5911, IFN5912



Die Size = 0.026" X 0.026" All Bond Pads = 0.004" Sq. Substrate is also Gate.

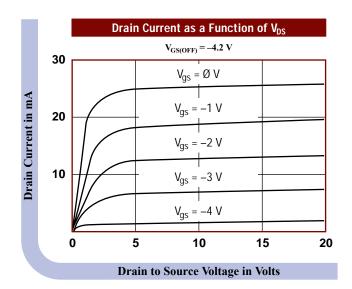
At 25°C free air temperature:		NJ36D Process					
Static Electrical Characteristics		Min	Тур	Max	Unit	Test Conditions	
Gate Source Breakdown Voltage	V _{(BR)GSS}	- 25	- 35		V	$I_G = -1 \text{ mA}, V_{DS} = \emptyset V$	
Reverse Gate Leakage Current	I _{GSS}		0.05	0.1	nA	$V_{GS} = -15 V$, $V_{DS} = \emptyset V$	
Drain Saturation Current (Pulsed)	I _{DSS}	1		40	mA	$V_{DS} = 15 V, V_{GS} = \emptyset V$	
Gate Source Cutoff Voltage	V _{GS(OFF)}	- 0.5		- 8	V	V _{DS} = 15V, I _D = 1 nA	
Dynamic Electrical Characteristics							
Drain Source ON Resistance	r _{ds(on)}	90		250	Ω	$I_D = \emptyset \text{ mA}, V_{GS} = \emptyset V$	f = 1 kHz
Forward Transconductance	9 _{fs}		8.5		mS	$V_{DS} = 15 V, V_{GS} = \emptyset V$	f = 1 kHz
Input Capacitance	C _{iss}		5.5	7.0	pF	$V_{DS} = 10 V, V_{GS} = \emptyset V$	f = 1 MHz
Feedback Capacitance	C _{rss}		1.5	3	pF	$V_{DS} = 10 V$, $V_{GS} = \emptyset V$	f = 1 MHz
Equivalent Noise Voltage	ē _N		5		nV/√HZ	V _{DS} = 15V, I _D = 5 mA	f = 1 kHz
Differential Gate Source Voltage	V _{GS1} - V _{GS2}	5	20	100	mV	V _{DG} = 15V, I _D = 5 mA	

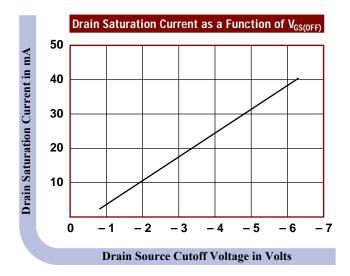


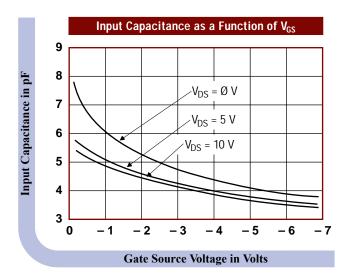
www.interfet.com

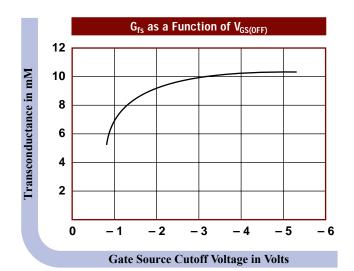
NJ36D Process

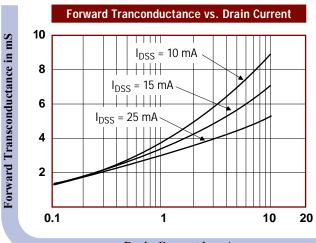
Silicon Junction Field-Effect Transistor











Drain Current in mA

