

## NJ01 Process

### Silicon Junction Field-Effect Transistor

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

#### Absolute maximum ratings at TA = 25 °C

Gate Current, I <sub>g</sub>	10 mA
Operating Junction Temperature, T <sub>j</sub>	+150°C
Storage Temperature, T <sub>s</sub>	- 65°C to +175°C

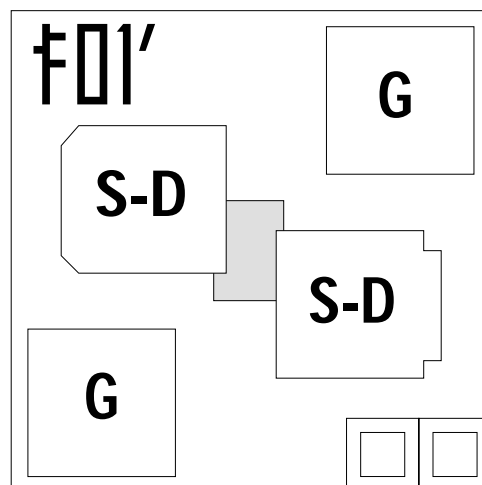
#### Devices in this Databook based on the NJ01 Process.

##### Datasheet

2N4117, 2N4117A  
2N4118, 2N4118A  
2N4119, 2N4119A  
IFN421, IFN422  
IFN423, IFN424  
IFN425, IFN426

##### Datasheet

DPAD1, DPAD2  
DPAD5, DPAD10  
PAD1, PAD2  
PAD5  
VCR7N



Die Size = 0.016" X 0.016"  
All Bond Pads = 0.004" Sq.  
Substrate is also Gate.

At 25°C free air temperature:

#### Static Electrical Characteristics

		NJ01 Process						
		Min	Typ	Max	Unit	Test Conditions		
Gate Source Breakdown Voltage	V <sub>(BR)GSS</sub>	- 40	- 50		V	I <sub>G</sub> = - 1 μA, V <sub>DS</sub> = 0V		
Gate Reverse Current	I <sub>GSS</sub>		- 0.5	- 10	pA	V <sub>GS</sub> = - 20V, V <sub>DS</sub> = 0V		
Gate Source Cutoff Voltage	V <sub>GS(OFF)</sub>	- 0.5		- 6	V	V <sub>DS</sub> = 10V, I <sub>D</sub> = 1 μA		
Drain Saturation Current (Pulsed)	I <sub>DSS</sub>	0.03		0.6	mA	V <sub>DS</sub> = 10V, V <sub>GS</sub> = 0V		

#### Dynamic Electrical Characteristics

Common Source Forward Transconductance	g <sub>fs</sub>		175		μS	V <sub>DS</sub> = 10V, V <sub>GS</sub> = 0V	f = 1 kHz
Common Source Input Capacitance	C <sub>iss</sub>		2		pF	V <sub>DS</sub> = 10V, V <sub>GS</sub> = 0V	f = 1 MHz
Common Source Reverse Transfer Capacitance	C <sub>rSS</sub>		0.9		pF	V <sub>DS</sub> = 10V, V <sub>GS</sub> = 0V	f = 1 MHz



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