

NJ450 Process

Silicon Junction Field-Effect Transistor

- LOW R(on) Switch
- Low-Noise, High Gain Amplifier

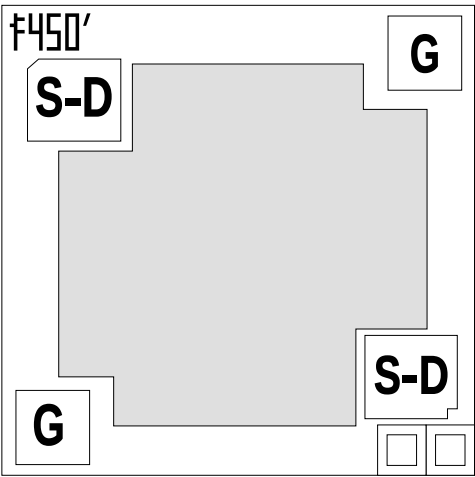
Absolute maximum ratings at TA = 25 °C

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

Devices in this Databook based on the NJ450 Process.

Datasheet

2SK363
IFN146, IFN147
IFN363
J108, J109
J110, J110A



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		NJ450 Process					
		Min	Typ	Max	Unit	Test Conditions	
Gate Source Breakdown Voltage	V _{(BR)GSS}	– 25	– 30		V	I _G = – 1 µA, V _{DS} = 0V	
Reverse Gate Leakage Current	I _{GSS}		– 50	– 1000	pA	V _{GS} = – 15V, V _{DS} = 0V	
Drain Saturation Current (Pulsed)	I _{DSS}	5		600	mA	V _{DS} = 15V, V _{GS} = 0V	
Gate Source Cutoff Voltage	V _{GS(OFF)}	– 0.1		– 10	V	V _{DS} = 15V, I _D = 1 nA	

Dynamic Electrical Characteristics							
Drain Source ON Resistance	r _{ds(on)}		7		Ω	I _D = 1 mA, V _{GS} = 0V	f = 1 kHz
Forward Transconductance	g _{fs}		250		mS	V _{DS} = 15V, V _{GS} = 0V	f = 1 kHz
Input Capacitance	C _{iss}		20		pF	V _{DS} = 0V, V _{GS} = – 10V	f = 1 MHz
Feedback Capacitance	C _{rss}		10		pF	V _{DS} = 0V, V _{GS} = – 10V	f = 1 MHz

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