LSJ201
N-CHANNEL JFET

Linear Systems replaces discontinued Siliconix J201

The LSJ201 is a high gain N-Channel JFET

This n-channel JFET is optimised for high gain. The part is particularly suitable for use in low power or high impedance amplifiers. The SOT-23 package is well suited for cost sensitive applications and mass production.

(See Packaging Information).

LSJ201 Benefits:

- High Input Impedance
- Low Cutoff Voltage
- Low Noise

LSJ201 Applications:

- Battery powered amplifiers
- Audio Pre-Amplifiers
- Infra-Red Detector Amplifiers

FEATURES	
DIRECT REPLACEMENT FOR SILICONIX J201	
LOW CUT OFF VOLTAGE	$V_{GS(off)} \leq 1.5$
HIGH GAIN	$A_V = 80$ V/V
ABSOLUTE MAXIMUM RATINGS @ 25°C (unless otherwise noted)	
Maximum Temperatures	
Storage Temperature	-65°C to +150°C
Operating Junction Temperature	-55°C to +135°C
Maximum Power Dissipation	
Continuous Power Dissipation	350mW
MAXIMUM CURRENT	
Forward Gate Current (Note 1)	50mA
MAXIMUM VOLTAGES	
Gate to Drain Voltage	V_{GDS} = -40V
Gate to Source Voltage	V_{GSS} = -40V

LSJ201 ELECTRICAL CHARACTERISTICS @ 25°C (unless otherwise noted)

SYMBOL	CHARACTERISTIC	MIN	TYP.	MAX	UNITS	CONDITIONS
BV_{GSS}	Gate to Source Breakdown Voltage	-40	--	--		I_G = 1µA, V_{DS} = 0V
$V_{GS(off)}$	Gate to Source Cutoff Voltage	-0.3	--	-1.5	V	V_{DS} = 15V, I_D = 10nA
I_{DSS}	Drain to Source Saturation Current (Note 2)	0.2	--	1	mA	V_{DS} = 15V, V_{GS} = 0V
I_{GSS}	Gate Reverse Current	-2	--	-100		V_{GS} = -20V, V_{DS} = 0V
I_G	Gate Operating Current	--	-2	--	pA	V_{DG} = 10V, I_D = 0.1mA
$I_{D(off)}$	Drain Cutoff Current	--	2	--		V_{DS} = 15V, V_{GS} = -5V
g_{fs}	Forward Transconductance	0.5	--	--	mS	V_{DS} = 15V, V_{GS} = 0V , f = 1kHz
C_{iss}	Input Capacitance	--	4.5	--	pF	V_{DS} = 15V, V_{GS} = 0V, f = 1MHz
C_{rss}	Reverse Transfer Capacitance	--	1.3	--		
e_n	Equivalent Noise Voltage	--	6	--	nV/√Hz	V_{DS} = 10V, I_D = 1mA , f = 1kHz

Note 1 - Absolute maximum ratings are limiting values above which LSJ201 serviceability may be impaired.
Note 2 – Pulse test: PW≤ 300 µs, Duty Cycle ≤ 3%

Micross Components Europe

Tel: +44 1603 788967
Email: chipcomponents@micross.com
Web: http://www.micross.com/distribution

Available Packages:

LSJ201 in SOT-23
LSJ201 in bare die.

Please contact Micross for full package and die dimensions

SOT-23 (Top View)