

LINEAR SYSTEMS

Twenty-Five Years Of Quality Through Innovation

FEATURES

DIRECT REPLACEMENT FOR SILICONIX J/SST201 SERIES

LOW CUTOFF VOLTAGE $V_{GS(off)} \leq 1.5V$

HIGH GAIN $A_v = 80 V/V$

ABSOLUTE MAXIMUM RATINGS¹

@ 25 °C (unless otherwise stated)

Maximum Temperatures

Storage Temperature -55 to +150 °C

Operating Junction Temperature -55 to +150 °C

Maximum Power Dissipation

Continuous Power Dissipation $T_A=25^\circ C$ 350mW

Maximum Current

Forward Gate Current 50mA

Maximum Voltages

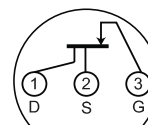
Gate to Drain Voltage -40V

Gate to Source Voltage -40V

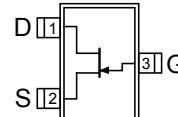
J/SST201 SERIES

HIGH GAIN
N-CHANNEL JFET

J SERIES
TO-92
TOP VIEW



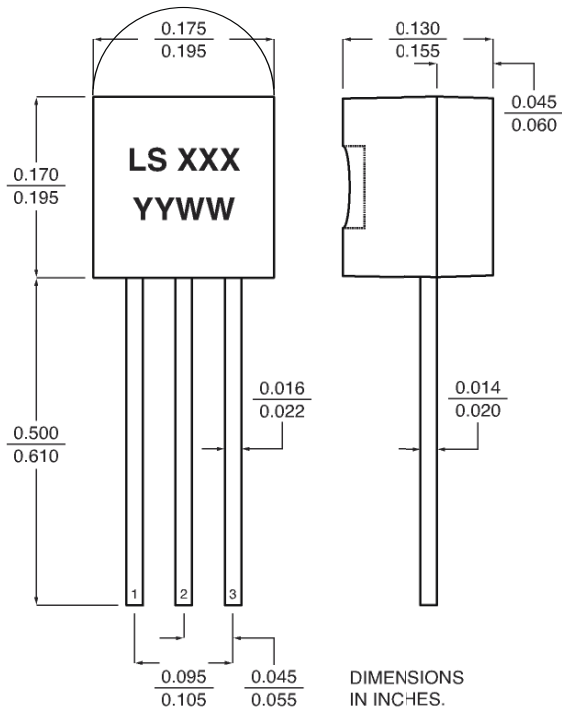
SST SERIES
SOT-23
TOP VIEW



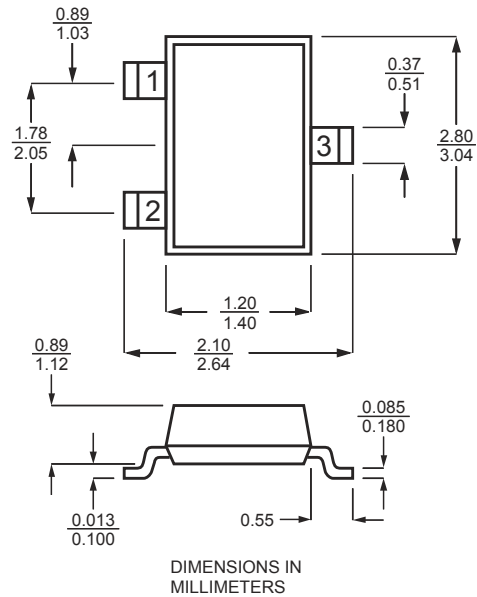
ELECTRICAL CHARACTERISTICS @ 25 °C (unless otherwise stated)

SYMBOL	CHARACTERISTIC	MIN	TYP	MAX	UNITS	CONDITIONS	
BV_{GSS}	Gate to Source Breakdown Voltage	J/SST201, 202	-40			V	$I_G = -1\mu A, V_{DS} = 0V$
		J/SST204	-25				
$V_{GS(off)}$	Gate to Source Cutoff Voltage	J/SST201	-0.3		-1.5	V	$V_{DS} = 15V, I_D = 10nA$
		J/SST202	-0.8		-4		
		J/SST204	-0.2		2		
I_{DSS}	Drain to Source Saturation Current ²	J/SST201	0.2		1	mA	$V_{DS} = 15V, V_{GS} = 0V$
		J/SST202	0.9		4.5		
		J/SST204	0.2		3		
I_{GSS}	Gate Reverse Current			-100	pA	$V_{GS} = -20V, V_{DS} = 0V$	
I_G	Gate Operating Current		-2			$V_{DG} = 10V, I_D = 0.1mA$	
$I_{D(off)}$	Drain Cutoff Current		2			$V_{DS} = 15V, V_{GS} = -5V$	
g_{fs}	Forward Transconductance	J/SST201, 204	0.5			mS	$V_{DS} = 15V, V_{GS} = 0V, f = 1kHz$
		J/SST202	1				
C_{iss}	Input Capacitance		4.5		pF	$V_{DS} = 15V, V_{GS} = 0V, f = 1MHz$	
C_{rss}	Reverse Transfer Capacitance		1.3				
e_n	Noise Voltage		6		nV/ \sqrt{Hz}	$V_{DS} = 10V, V_{GS} = 0V, f = 1kHz$	

TO-92



SOT-23



1. Absolute maximum ratings are limiting values above which serviceability may be impaired.
2. Pulse Test: $PW \leq 300\mu s$, Duty Cycle $\leq 3\%$

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3. All characteristics MIN/TYP/MAX numbers are absolute values. Negative values indicate electrical polarity only.

Linear Integrated Systems (LIS) is a 25-year-old, third-generation precision semiconductor company providing high-quality discrete components. Expertise brought to LIS is based on processes and products developed at Amelco, Union Carbide, Intersil and Micro Power Systems by company President John H. Hall. Hall, a protégé of Silicon Valley legend Dr. Jean Hoerni, was the director of IC Development at Union Carbide, co-founder and vice president of R&D at Intersil, and founder/president of Micro Power Systems.