

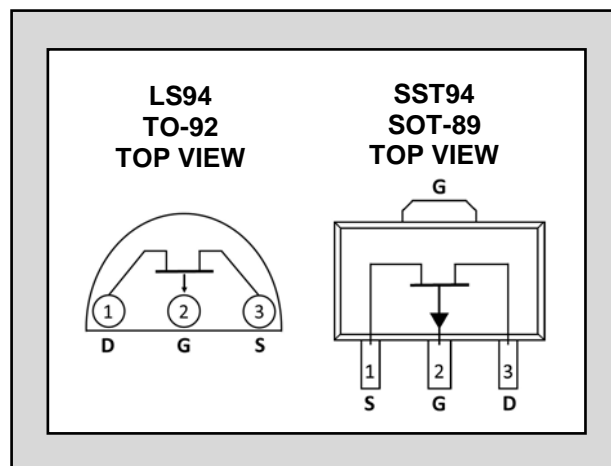
LINEAR SYSTEMS

Over 30 Years of Quality Through Innovation

LS94, SST94

GENERAL PURPOSE
SINGLE P-CHANNEL JFET

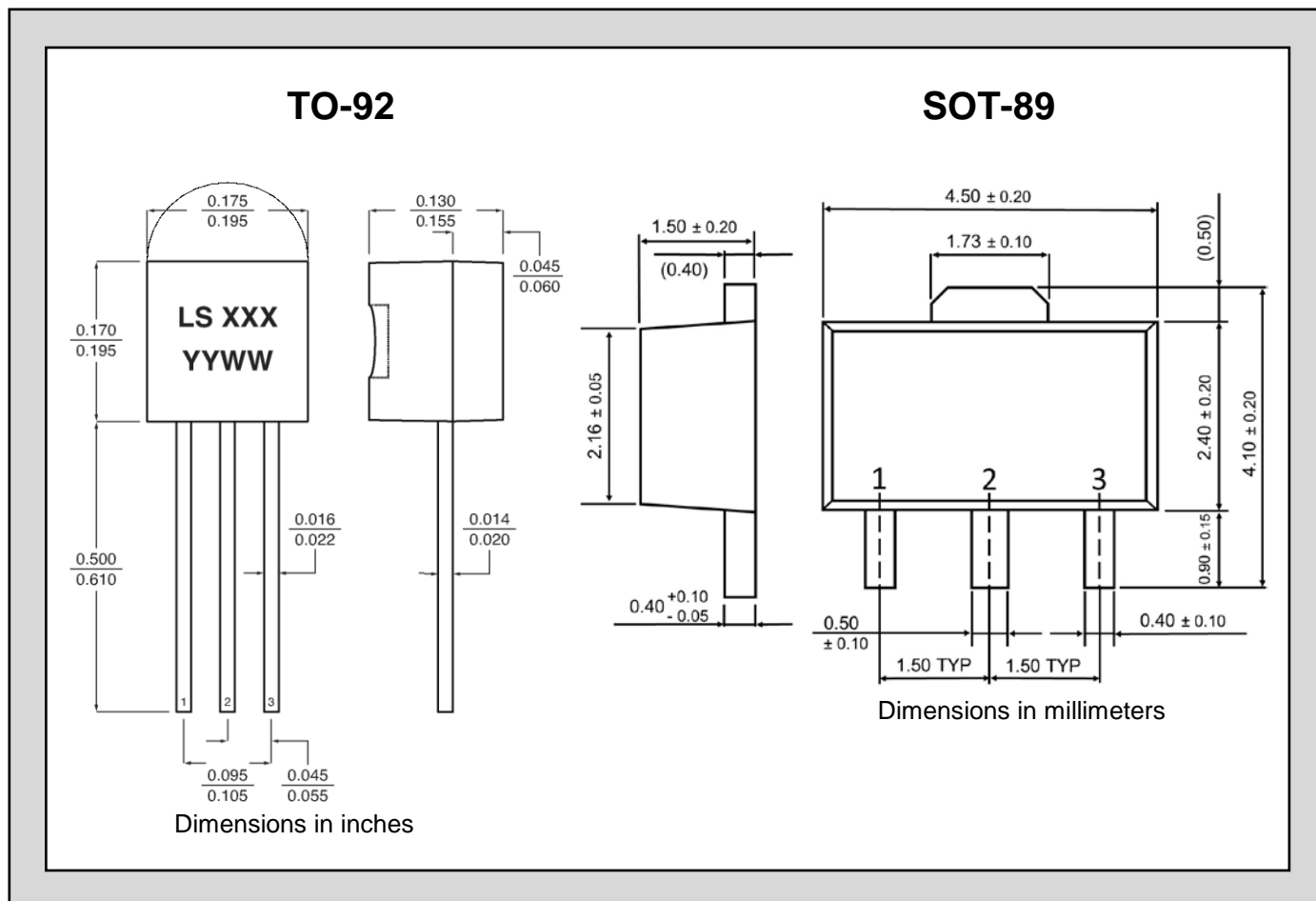
FEATURES	
HIGH GAIN	$G_{fs} = 22\text{mS (typ)}$
HIGH INPUT IMPEDANCE	$I_G = 1.0\text{nA}$
LOW CAPACITANCE	$C_{RSS} = 32\text{pF}$
ABSOLUTE MAXIMUM RATINGS¹ @ 25 °C (unless otherwise stated)	
Maximum Temperatures	
Storage Temperature	-55 to +150°C
Junction Operating Temperature	-55 to +135°C
Maximum Power Dissipation	
Continuous Power Dissipation	400mW
Maximum Currents	
Gate Forward Current	$I_{G(F)} = -10\text{mA}$
Maximum Voltages	
Gate to Drain Voltage	$V_{GD} = 25\text{V}$
Gate to Source Voltage	$V_{GS} = 25\text{V}$



* For equivalent N-Channel, see LSK190

ELECTRICAL CHARACTERISTICS @ 25°C (unless otherwise stated)

SYMBOL	CHARACTERISTIC	MIN	TYP	MAX	UNITS	CONDITIONS
BV_{GDS}	Gate to Drain Breakdown Voltage	25			V	$V_{DS} = 0\text{V}, I_G = 100\mu\text{A}$
$V_{GS(OFF)}$	Gate to Source Pinch-off Voltage	0.15		2		$V_{DS} = -10\text{V}, I_D = -0.1\mu\text{A}$
I_{DSS}	Drain to Source Saturation Current ²	-2.6		-30	mA	$V_{DS} = -10\text{V}, V_{GS} = 0\text{V}$
I_G	Gate Operating Current		50		pA	$V_{DG} = -10\text{V}, I_D = -1\text{mA}$
I_{GSS}	Gate to Source Leakage Current			1	nA	$V_{GS} = 25\text{V}, V_{DS} = 0\text{V}$
G_{fss}	Full Conductance Transconductance	8	22		mS	$V_{DS} = -10\text{V}, V_{GS} = 0\text{V}, f = 1\text{kHz}$
$R_{DS(on)}$	Drain to Source on Resistance		75	150	Ω	$V_{GS} = 0\text{V}, I_D = -1\text{mA}$
C_{ISS}	Common Source Input Capacitance		105		pF	$V_{DS} = -10\text{V}, V_{GS} = 0\text{V}, f = 1\text{MHz}$
C_{RSS}	Common Source Reverse Transfer Cap.		32			$V_{DS} = -10\text{V}, I_D = 0\text{A}, f = 1\text{MHz}$

**NOTES:**

1. Absolute maximum ratings are limiting values above which serviceability may be impaired.
2. Pulse test: $PW \leq 300 \mu s$, Duty Cycle $\leq 3\%$
3. All MIN/TYP/MAX Limits are absolute values. Negative signs indicate negative electrical polarity only.

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