

LSK389 A/B/C/D

Ultra Low Noise Monolithic Dual N-Channel JFET Amplifier

Electrical Characteristics @ 25°C (unless otherwise stated)

SYMBOL	CHARACTERISTIC	MIN	TYP	MAX	UNITS	CONDITIONS	
BV _{GSS}	Gate to Source Breakdown Voltage		-40			V	$V_{DS} = 0$, $I_D = -100 \mu A$
V _{GS(OFF)}	Gate to Source Pinch-off Voltage		-0.3		-1.6	V	V _{DS} = 10V, I _D = 0.1μA
	Drain to Source Saturation Current	LSK389A	2.6		6.5	mA	$V_{DS}=10V_{\ast}V_{OS}=0$
		LSK389B	6		12		
oss		LSK389C	10		20		
		LSK389D	17		30		
I _{GSS}	Gate to Source Leakage Current			-100	-300	pA	V _{GS} = -25V, V _{DS} = 0
l ₀₁₀₂	Gate to Gate Isolation Current			±1.0	±50	nA	V _{61*62} = ±45V, I _D = I _S = 0A
Gis	Full Conduction Transconductance		8	20		mS	V _{DS} = 10V, V _{GS} = 0, f = 1kHz
e _n	Noise Voltage			1.3	1.9	nV/√Hz	V _{DS} = 10V, I _D = 2mA, f = 1kHz, NBW = 1Hz
e _n	Noise Voltage			1.5	4.0	nV/√Hz	V _{DS} = 10V, I _D = 2mA, f = 10Hz, NBW = 1Hz
C _{ISS}	Common Source Input Capacitance			25		pF	V _{DS} = 10V, V _{GS} = 0, f = 1MHz,
C _{RSS}	Common Source Reverse Transfer Cap.			5.5		pF	V _{DG} = 10V, I _D = 0, f = 1MHz,

Matching Characteristics @ 25°C (unless otherwise stated)

SYMBOL	CHARACTERISTIC	MIN	TYP	MAX	UNITS	CONDITIONS
Vast - Vasz	Differential Gate to Source Cutoff Voltage		6.0	15	mV	V _{DS} = 10V, I _D = 1mA
IDSS1 IDSS2	Saturation Drain Current Ratio	0.9	1.0	1.1	n/a	V _{DS} = 10V, V _{DS} = 0V

Absolute Maximum Ratings@ 25 °C (unless otherwise stated)Maximum Temperatures Storage Temperature-65 to +150°C Junction Operating Temperature-55 to +150°C Maximum Continuous Power Dissipation @ +25°C 400mW Maximum Currents: Gate Forward CurrentIG(F)= 10mA Maximum Voltages: Gate to SourceVGSS= 40 VGate to DrainVGDS= 40V

ldss: 4.25 mA vds(v): 10 v vgs: 0.2 vds(v): 10 V V GS(0FF): 0.4 V

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File: piezo-jfet.sch

Title: Balanced amplifier for piezo elements.

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