

LINEAR SYSTEMS

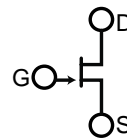
Twenty-Five Years Of Quality Through Innovation

J210, J211, J212 SSTJ210, SSTJ211, SSTJ212

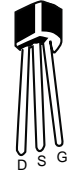
LOW NOISE N-CHANNEL JFET
GENERAL PURPOSE AMPLIFIER

FEATURES	
HIGH GAIN	$g_{fs}=7000\mu\text{mho}$ MINIMUM (J211, J212)
HIGH INPUT IMPEDENCE	$I_{GSS}=100\text{pA}$ MAXIMUM
LOW CAPACITANCE	$C_{ISS}=5\text{pF}$ TYPICAL
ABSOLUTE MAXIMUM RATINGS	
@ 25 °C (unless otherwise stated)	
Gate-Drain or Gate-Source Voltage	-25V
Gate Current	10mA
Total Device Dissipation @25°C Ambient (Derate 3.27 mW/°C)	360mW
Operating Temperature Range	-55 to +150 °C

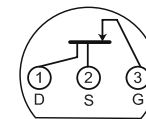
TO-92



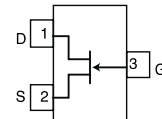
Plastic



TO-92
TOP VIEW
J210, J211, J212



SOT-23
TOP VIEW
SSTJ210, SSTJ211, SSTJ212



ELECTRICAL CHARACTERISTICS @ 25 °C (unless otherwise stated)

SYMBOL	CHARACTERISTICS	SSTJ210			SSTJ211			SSTJ212			UNITS	CONDITIONS	
		MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX			
I_{GSS}	Gate Reverse Current	--	--	-100	--	--	-100	--	--	-100	pA	$V_{DS}=0, V_{GS}=-15\text{V}$ (NOTE 1)	
$V_{GS(off)}$	Gate-Source Cutoff Voltage	-1	--	-3	-2.5	--	-4.5	-4	--	-6	V	$V_{DS}=15\text{V}, I_D=1\text{nA}$	
BV_{GSS}	Gate-Source Breakdown Voltage	-25	--	--	-25	--	--	-25	--	--		$V_{DS}=0, I_G=-1\mu\text{A}$	
I_{DSS}	Drain Saturation Current	2	--	15	7	--	20	15	--	40	mA	$V_{DS}=15\text{V}, V_{GS}=0$ (NOTE 2)	
I_G	Gate Current	--	-10	--	--	-10	--	--	-10	--	pA	$V_{DS}=10\text{V}, I_D=1\text{mA}$ (NOTE 1)	
g_{fs}	Common-Source Forward Transconductance	4,000	--	12,000	6,000	--	12,000	7,000	--	12,000	μmho	$V_{DS}=15\text{V}, V_{GS}=0$	
g_{os}	Common-Source Output Conductance	--	--	150	--	--	200	--	--	200			f=1kHz
C_{ISS}	Common-Source Input Capacitance	--	4	--	--	4	--	--	4	--	pF		f=1MHz
C_{RSS}	Common-Source Reverse Transfer Capacitance	-	1	--	--	1	--	--	1	--			f=1kHz
e_n	Equivalent Short-Circuit Input Noise Voltage	-	10	--	--	10	--	--	10	--	$\text{nV}\sqrt{\text{Hz}}$	f=1kHz	

NOTE

- Approximately doubles for every 10°C increase in T_A .
- Pulse test duration = 2ms.

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