

N-Channel Silicon Junction Field-Effect Transistor

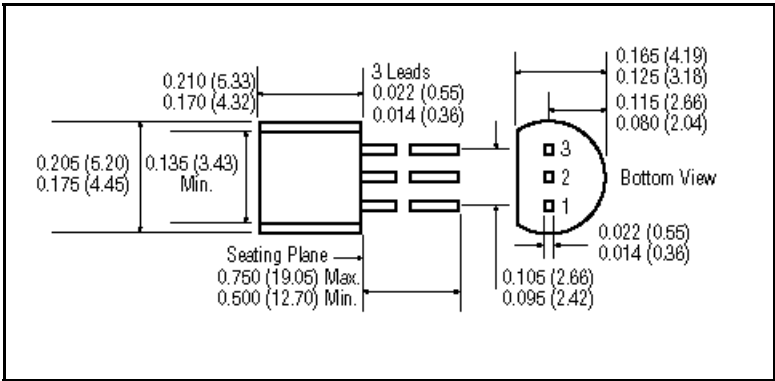
• Audio Amplifier

Absolute maximum ratings at $T_A = 25^{\circ}\text{C}$

Reverse Gate Source & Reverse Gate Drain Voltage	- 40 V
Continuous Forward Gate Current	50 mA
Continuous Device Power Dissipation	360 mW
Power Derating	3.27 mW/ $^{\circ}\text{C}$

At 25°C free air temperature: Static Electrical Characteristics		J232			Process NJ16	
		Min	Typ	Max	Unit	Test Conditions
Gate Source Breakdown Voltage	$V_{(BR)GSS}$	- 40			V	$I_G = -1\text{ }\mu\text{A}$, $V_{DS} = \emptyset\text{ V}$
Gate Reverse Current	I_{GSS}			- 250	pA	$V_{GS} = -30\text{ V}$, $V_{DS} = \emptyset\text{ V}$
Gate Operating Current	I_G		- 2		pA	$V_{DS} = 20\text{ V}$, $I_D = \emptyset\text{ V}$
Gate Source Cutoff Voltage	$V_{GS(OFF)}$	- 3		- 6	V	$V_{DS} = 20\text{ V}$, $I_D = 1\text{ }\mu\text{A}$
Drain Saturation Current (Pulsed)	I_{DSS}	5		10	mA	$V_{DS} = 20\text{ V}$, $V_{GS} = \emptyset\text{ V}$

Dynamic Electrical Characteristics						
Common Source Forward Transconductance	g_{fs}	2500		5000	μS	$V_{DS} = 20\text{ V}$, $V_{GS} = \emptyset\text{ V}$, $f = 1\text{ kHz}$
Common Source Output Conductance	g_{os}		5		μS	$V_{DS} = 20\text{ V}$, $V_{GS} = \emptyset\text{ V}$, $f = 1\text{ kHz}$
Common Source Input Capacitance	C_{iss}		4		pF	$V_{DS} = 20\text{ V}$, $V_{GS} = \emptyset\text{ V}$, $f = 1\text{ MHz}$
Common Source Reverse Transfer Capacitance	C_{rss}		1		pF	$V_{DS} = 20\text{ V}$, $V_{GS} = \emptyset\text{ V}$, $f = 1\text{ MHz}$
Equivalent Short Circuit Input Noise Voltage	e_N		20	30	nV/ $\sqrt{\text{Hz}}$	$V_{DS} = 10\text{ V}$, $V_{GS} = \emptyset\text{ V}$, $f = 10\text{ Hz}$
			6		nV/ $\sqrt{\text{Hz}}$	$V_{DS} = 10\text{ V}$, $V_{GS} = \emptyset\text{ V}$, $f = 1\text{ kHz}$



TO-226AA Package (T092)
Dimensions in Inches (mm)
Pin Configuration
1 Drain, 2 Source, 3 Gate

Surface Mount - SMPJ232

Mouser Electronics

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