U232

N-Channel Dual Silicon Junction Field-Effect Transistor

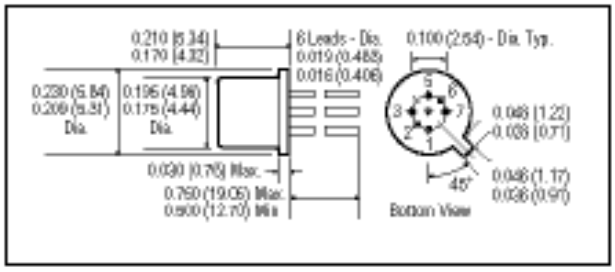
- **Differencial Amplifier**
- **Low & Maximum Frequency Amplifier**

Absolute maximum ratings at $T_A = 25^oC$

Reverse Gate Source & Gate Drain Voltage	-50V
Continuous Forward Gate Current	50 mA
Continuous Device Power Dissipation	300 mW
Power Derating	1.7 mW/^{o}C
Storage Temperature Range	-65^{o}C to +150^{o}C

At 25^{o}C free air temperature		**U232**			**Process NJ16**		
Static Electrical Characteristics		**Min**	**Typ**	**Max**	**Unit**	**Test Conditions**	
Gate Source Breakdown Voltage	$V_{(BR)GSS}$	-50			V	I_G = -1 uA, V_{DS} = 0 V	
Gate Reverse Current	I_{GSS}			-0.1	nA	V_{GS} = -10 V, V_{DS} = 0 V	
Gate Source Cutoff Voltage	$V_{GS(OFF)}$	-0.5		-4.5	V	V_{DS} = 10 V, V_{GS} = 0 V	
Drain Saturation Current (pulsed)	I_{DSS}	0.5		5	mA	V_{DS} = 10 V, V_{GS} = 0 V	
Dynamic Electrical Characteristics							
Common-Source Forward Transconductance	g_{fs}	1		3	mS	V_{DS} = 10 V, VGS = 0 V	f = 1 kHz
Common-Source Input Capacitance	C_{iss}			6	pF	V_{DS} = 10V, I_D = 5 mA	f = 1 MHz
Common-Source Reverse Transfer Capacitance	C_{rss}			2	pF	V_{DS} = 10 V, I_D = 5 mA	f = 1 MHz
Equivalent Short Circuit Input Noise Voltage	~e_N			80	nV/√Hz	V_{DS} = 10 V, I_D = 5 mA	f = 100 Hz

Matching Characteristics		Min	Max	Units	Test Conditions
Differencial Gate-Source Voltage	(VGS1-VGS2)		10	mV	VDS = 10 V, ID = -10 mA
Differencial Gate Source Voltage with Temperature	$\frac{\Delta \lvert VGS1-VGS2 \rvert}{\Delta T}$		25	µV/°C	VDG = 10 V, ID = 30 µA



TO-71 Package
Dimensions in inches (mm)
Pin Configuration
1 Source, 2 Drain, 3 Gate,
5 Source, 6 Drain, 7 Gate

Surface Mount Version:
SMPU232

InterFET

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