

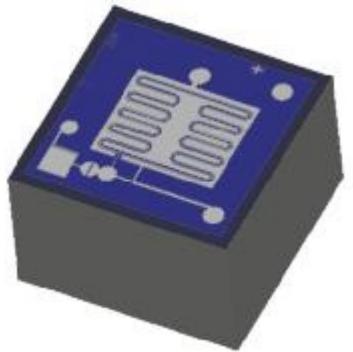


LOW NOISE JFETS

MX16

FEATURES

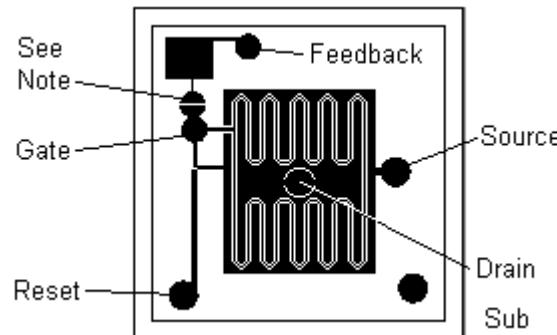
- Ultra Low Noise
 - Less than 1.5nV @ 1KHz, 20°C
- Free of Generation Recombination Noise
- Excellent gm to C_{gs} Ratio
 - g_m=28mS, C_{gs}=4pF, 20°C
- 4-Terminal
- N-Channel
- Available in Die and Other Packages



Die Size 0.80mm x 0.80mm x 0.50mm

Noise Characteristics Units in nV/√Hz	Typ	Max	Test Condition		Temp
1KHz	1.1		V _{ds} =4V, I _d =5mA		20°C
10KHz	0.8		V _{ds} =4V, I _d =5mA		20°C
100KHz	0.8		V _{ds} =4V, I _d =5mA		20°C
1KHz	0.9	1.3	V _{ds} =4V, I _d =5mA		-100°C
10KHz	0.6	1.0	V _{ds} =4V, I _d =5mA		-100°C
100KHz	0.6	1.0	V _{ds} =4V, I _d =5mA		-100°C

Static Characteristics		Min	Typ	Max	Unit	Test Condition
Gate to Source Breakdown	BV _{gss}	20	26		V	V _{ds} =0V, I _g =1μA, V _{sub} =0V
Reverse Leakage Current	I _{sub} I _{gss}		0.4		pA	V _{reverse} = -10V
Gate to Source Cutoff Voltage	V _{gs}		10		V	V _{sub} =0V, I _d =1nA
Drain Saturation Current	I _{ds}		300		mA	V _{sub} =0V, V _{gs} =0V
Dynamic Characteristics						
Transconductance	g _m		28 40		mS	V _{ds} =4V, I _d =5mA, 20°C V _{ds} =4V, I _d =5mA, -100°C
Gate to Source Capacitance	C _{gs}		4		pF	V _{gs} =0V, V _{ds} =4V, I _d =5mA



The bottom gate on this 4 terminal JFET is the substrate.

