



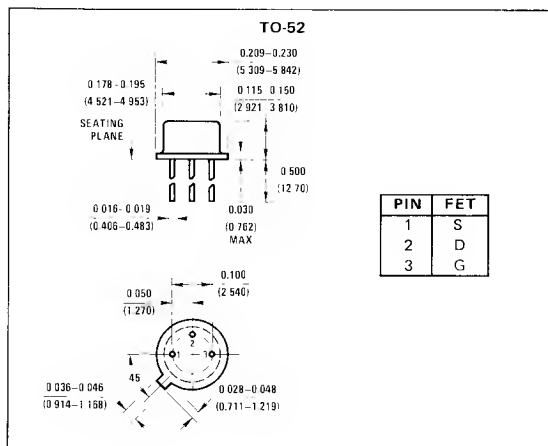
U308-10 N-Channel JFETs

General Description

The U308 thru U310 series of N-channel JFETs is designed for VHF amplifier, oscillator and mixer applications.

Absolute Maximum Ratings (25°C)

Gate-Drain or Gate-Source Voltage	-25V
Gate Current	20 mA
Total Power Dissipation	500 mW
Power Derating	4 mW/°C
Storage Temperature Range	-65°C to +200°C
Lead Temperature (1/16" from case for 10 seconds)	300°C



Electrical Characteristics (25°C unless otherwise noted)

PARAMETER	CONDITIONS	U308		U309		U310		UNITS
		MIN	TYP	MAX	MIN	TYP	MAX	
I _{GSS}	Gate Reverse Current			-150			-150	μA
				-150			-150	nA
BV _{GSS}	Gate Source Breakdown Voltage	-25			-25			V
V _{GS(off)}	Gate Source Cutoff Voltage	-10		-6.0	-1.0		4.0	V
I _{DSS}	Saturation Drain Current	12		60	12		30	mA
V _{GS(f)}	Gate-Source Forward Voltage			1.0			1.0	V
g _{fg}	Common Gate Forward Transconductance, (Note 1)	10		20	10		20	mmho
g _{ogs}	Common Gate Output Conductance			150			150	μmho
C _{gd}	Drain Gate Capacitance			2.5			2.5	pF
C _{gs}	Gate Source Capacitance			5.0			5.0	pF
e _n	Equivalent Short Circuit Input Noise Voltage		10			10		nV/√Hz
g _{fg}	Common Gate Forward Transconductance		12			12		mmho
g _{ogs}	Common Gate Output Conductance		0.18			0.18		μmho
G _{pg}	Common Gate Power Gain		15			15		dB
NF	Noise Figure		1.5			1.5		dB

Note 1: Pulse test duration = 2 ms.