New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.
SPRINGFIELD, NEW JERSEY 07081
U.S.A.

TELEPHONE: (973) 376-2922
(212) 227-6005
FAX: (973) 376-8960

U311

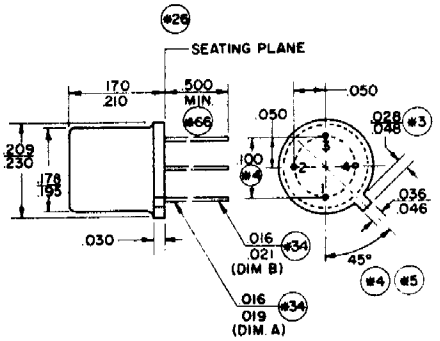
N-Channel Silicon Junction Field-Effect Transistor

- Mixer
- Oscillator
- VHF/UHF Amplifier

Absolute maximum ratings at T_A = 25°C.

Reverse Gate Source & Reverse Gate Drain Voltage	– 25 V
Continuous Forward Gate Current	10 mA
Continuous Device Power Dissipation	300 mW
Power Derating	2.4 mW/°C

At 25°C free air temperature:		U311					
Static Electrical Characteristics		**Min**	**Typ**	**Max**	**Unit**	**Test Conditions**	
Gate Source Breakdown Voltage	$V_{(BR)GSS}$	– 25			V	I_G = – 1 µA, V_{DS} = ØV	
Gate Reverse Current	I_{GSS}			– 150	pA	V_{GS} = – 15V, V_{DS} = ØV	
				– 150	nA	V_{GS} = – 15V, V_{DS} = ØV	T_A = 150°C
Gate Source Cutoff Voltage	$V_{GS(OFF)}$	– 1		– 6	V	V_{DS} = 10V, I_D = 1 nA	
Gate Source Forward Voltage	$V_{GS(F)}$			1	V	V_{DS} = ØV, I_G = 1 mA	
Drain Saturation Current (Pulsed)	I_{DSS}	20		60	mA	V_{DS} = 10V, V_{GS} = ØV	
Dynamic Electrical Characteristics							
Common Gate Forward Transconductance	g_{fg}	1000	17000		µS	V_{DS} = 10V, I_D = 10 mA	f = 1 kHz
Common Gate Output Conductance	g_{og}			250	µS	V_{DS} = 10V, I_D = 10 mA	f = 1 kHz
Gate Drain Capacitance	C_{dg}			2.5	pF	V_{DS} = 10V, I_D = 10 mA	f = 1 MHz
Gate Source Capacitance	C_{gs}			5	pF	V_{DS} = 10V, I_D = 10 mA	f = 1 MHz



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

Quality Semi-Conductors

Download from alldatasheet.com