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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

Continuous Forward Gate Current

Continuous Device Power Dissipation

Power Derating

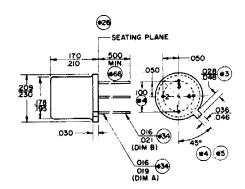
- 25 V 10 mA

300 mW

2.4 mW/°C

At 25°C free air temperature: Static Electrical Characteristics		U311					
		Min	Тур	Max	Unit	Test Conditions	
Gate Source Breakdown Voltage	V _{(BR)GSS}	- 25			٧	$I_G = -1 \mu A$, $V_{DS} = \emptyset V$	
Gate Reverse Current	I _{GSS}			– 150	pА	$V_{GS} = -15 \text{ V}, V_{DS} = \emptyset \text{ V}$	
				– 150	nΑ	$V_{GS} = -15V$, $V_{DS} = \emptyset V$	T _A = 150°C
Gate Source Cutoff Voltage	V _{GS(OFF)}	<u> </u>		- 6	٧	$V_{DS} = 10 \text{ V}, I_D = 1 \text{ nA}$	
Gate Source Forward Voltage	V _{GS(F)}			1	٧	$V_{DS} = \emptyset V$, $I_G = 1 \text{ mA}$	
Drain Saturation Current (Pulsed)	I _{DSS}	20		60	mΑ	V _{DS} = 10V, V _{GS} = ØV	

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Common Gate Forward Transconductance	9 _{fg}	1000	17000		μS	$V_{DS} = 10 \text{ V}, I_{D} = 10 \text{ mA}$	f = 1 kHz
Common Gate Output Conductance	g _{og}			250	μS	$V_{DS} = 10 \text{ V}, I_{D} = 10 \text{ mA}$	f = 1 kHz
Gate Drain Capacitance	C _{dg}			2.5	рF	$V_{DS} = 10 \text{ V}, I_D = 10 \text{ mA}$	f = 1 MHz
Gate Source Capacitance	C _{gs}			5	pF	$V_{DS} = 10 \text{ V}, I_D = 10 \text{ mA}$	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