

NTE132

Silicon N-Channel JFET Transistor VHF Amplifier, Mixer

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Drain-Gate Voltage, V_{DG}	25V
Gate-Source Voltage, V_{GS}	-25V
Gate Current, I_G	10mA
Total Device Dissipation ($T_A = 25^\circ\text{C}$), P_D	200mW
Derate Above 25°C	2mW/ $^\circ\text{C}$
Operating Junction Temperature Range, T_J	-55° to $+150^\circ\text{C}$
Storage Temperature Range, T_{stg}	-55° to $+150^\circ\text{C}$
Lead Temperature (During Soldering, 1/16" from case for 10sec), T_L	$+260^\circ\text{C}$

Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Gate-Source Breakdown Voltage	$V_{(BR)GSS}$	$I_G = 1\mu\text{A}, V_{DS} = 0$	-25	-	-	V
Gate Reverse Current	I_{GSS}	$V_{GS} = 15\text{V}, V_{DS} = 0$	-	-	-2	nA
		$V_{GS} = 15\text{V}, V_{DS} = 0, T_A = +100^\circ\text{C}$	-	-	-2	nA
Gate-Source Cutoff Voltage	$V_{GS(off)}$	$I_D = 2\text{nA}, V_{DS} = 15\text{V}$	-	-	-8	V
Gate-Source Voltage	V_{GS}	$I_D = 50\mu\text{A}, V_{DS} = 15\text{V}$	-0.5	-	-7.5	V
Zero-Gate-Voltage Drain Current	I_{DSS}	$V_{DS} = 15\text{V}, V_{GS} = 0$	2	-	20	mA
Forward Transconductance	g_{fs}	$V_{DS} = 15\text{V}, V_{GS} = 0, f = 1\text{kHz}$	2500	-	7000	μmho
Forward Transfer Admittance	$ y_{fs} $	$V_{DS} = 15\text{V}, V_{GS} = 0, f = 100\text{MHz}$	2000	-	-	μmho
Output Admittance	$ y_{os} $	$V_{DS} = 15\text{V}, V_{GS} = 0, f = 1\text{kHz}$	-	-	50	μmho

