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## NTE132 Silicon N-Channel JFET Transistor VHF Amplifier, Mixer TO106 Type Package

**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 $25^\circ\text{C}$ .....	2mW/ $^\circ\text{C}$
Operating Junction Temperature Range, $T_J$ .....	$-55^\circ$ to $+150^\circ\text{C}$
Storage Temperature Range, $T_{stg}$ .....	$-55^\circ$ 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	$V_{(BR)GSS}$	$I_G = 1^\circ\text{A}$ , $V_{DS} = 0$	-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	$V_{GS}$	$I_D = 50^\circ\text{A}$ , $V_{DS} = 15\text{V}$	-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	$^\circ\text{mho}$
Forward Transfer Admittance	$ y_{fs} $	$V_{DS} = 15\text{V}$ , $V_{GS} = 0$ , $f = 100\text{MHz}$	2000	-	-	$^\circ\text{mho}$
Output Admittance	$ y_{os} $	$V_{DS} = 15\text{V}$ , $V_{GS} = 0$ , $f = 1\text{kHz}$	-	-	50	$^\circ\text{mho}$

