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## NTE1227 Integrated Circuit FM IF Amp

### **Features:**

- Includes 2 individual differential amps
- Excellent limiting characteristics
- Voltage gain  $30\text{dB}/R_L = 1\text{k}\Omega$ , 1 stage

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

Supply Voltage, $V_{CC}$ .....	20V
Output Voltage, $V_{CC4}, V_{CC5}, V_{CC7}$ .....	20V
Input Voltage, $V_{IN1}, V_{IN6}$ .....	$\pm 3\text{V}$
Total Dissipation Current, $I_{T1}, I_{T2}$ .....	28mA
Maximum Input Current, $I_2$ .....	$\pm 5\text{V}$
Power Dissipation, $P_D$ .....	550mW
Operating Temperature Range, $T_{opg}$ .....	-20° to +75°C
Storage Temperature Range, $T_{stg}$ .....	-40° to +125°C

Note \*. Supplying Voltage without above is inhibited.

Note \*\*. Supplying negative voltage on Pin 3 to Pin 2, 4, 5, 7 or 8 is inhibited.

### **Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$ , $V_{CC} = 12\text{V}$ , unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Power Dissipation	$P_d$		95	138	208	mW
Current Dissipation	$I_{CC}$		7.9	11.5	17.3	mA
Current at Differential Pair	$I_4, I_7$		1.33	2.2	3.47	mA
Output Saturation Current	$i_{ol}, i_{oll}$	$f = 10.7\text{MHz}$	1.24	1.75	2.48	mA
Forward Transadmittance	$ y_{f1} ,  y_{f11} $		22.4	32	44.6	mS
Parallel Input Resistance	$r_{il}, r_{ill}$		-	3.5	-	kΩ
Parallel Input Capacitance	$C_{il}, C_{ill}$		-	8.0	-	pF
Parallel Output Resistance	$r_{ol}, r_{oll}$		-	50	-	kΩ
Parallel Output Capacitance	$C_{ol}, C_{oll}$		-	3.0	-	pF

### Pin Connection Diagram

