

## NTE1575 Integrated Circuit B/W TV Sound IF Amplifier

**Features:**

- Supply Voltage Range:  $V_{CC} = 3V$  to  $8V$

**Applications:**

- Voice IF Amplifier
- Discriminator

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

Supply Voltage (Note 1),  $V_{CC}$  .....  $8V$   
 Power Dissipation ( $T_A = +75^\circ C$ ),  $P_T$  .....  $300mW$   
 Operating Temperature Range,  $T_{opr}$  .....  $-20^\circ$  to  $+75^\circ C$   
 Storage Temperature Range,  $T_{stg}$  .....  $-55^\circ$  to  $+125^\circ C$

Note 1. Recommended Operating Voltage is  $5.5V$  Typ.

**Electrical Characteristics:** ( $V_{CC} = 5.5V$ ,  $f_o = 4.5MHz$ ,  $\Delta f = \pm 25kHz$ ,  $f_m = 1kHz$ ,  $T_A = +25^\circ C$  unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	$I_Q$		13.9	17.0	21.8	mA
	$e_o$	$V_{in} = 100dB\mu$	160	270	400	$mV_{rms}$
Total Harmonic Distortion	THD	$V_{in} = 100dB\mu$	–	0.3	1.0	%
–3dB Sensitivity Limit	$V_{in}(lim)$		–	20.0	37.5	$dB\mu$
AM Rejection Ratio	AMR	$V_{in} = 60dB\mu$ , $f = 1kHz$ , MOD = 30%	35	–	–	dB
Signal-to-Noise Ratio	S/N		–	55	–	dB

### Pin Connection Diagram

