ELECTRONICS, INC.
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NTE1263
Integrated Circuit
Record/Playback Circuit for VCR

Features:

- Recording/Playback Circuit with Minor Modifications in Peripheral Circuitry
- Wide Application: Capable of Mic. Mixing and Variable Sound Monitoring
- Wide Suply Voltage Range: 3V to 14V
- Built–in AGC Circuit of Wide Control Range and Low Distortion
- High Density Integration, Low Noise

Absolute Maximum Ratings: (T_A = +25°C, unless otherwise specified)

Supply Voltage, V_{CC} 14.4V
Circuit Voltage, $V_{1–4}$ 1V
Circuit Voltage, $V_{6–4}$, $V_{7–4}$ 3V
Circuit Voltage, $V_{11–4}$, $V_{12–4}$ 14.4V
Circuit Voltage, $V_{13–4}$ 9V
Supply Current, I_{CC} 38mA
Power Dissipation ($T_A \le 70°C$), P_D 550mW
Operating Temperature Range, T_{opg} . . . . . –20° to +70°C
Storage Temperature Range, T_{stg} . . . . . –40° to +125°C

Electrical Characteristics: (T_A = +25°C, V_{CC} = 12V, f = 1kHz unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage (Line Amp)	$V_{O(L)}$	V_i = 2.5mV_{const} THD = 3% Output	2.8	3.2	–	V_{rms}
Output Voltage (Rec. Amp)	$V_{O(R)}$		2.8	3.2	–	V_{rms}
Total Harmonic Distortion	$THD_{(1)}$	V_i = 2.5mV_{const}	–	0.1	0.3	%
Closed Circuit Voltage Gain	G_{VC}		62	66	70	dB
Open Circuit Voltage Gain (EQ Amp)	$G_{VO(E)}$		47	53	–	dB
Output Voltage (AGC)	$V_{O(1)}$	V_i = 0.25mV_{const}	0.35	0.55	0.70	V
	$V_{O(2)}$	V_i = 25mV_{const}, AGC 40dB	0.5	0.8	1	V
Total Harmonic Distortion (AGC)	$THD_{(2)}$		–	0.2	1	%
Output Noise Voltage	V_{no}	R_g = 2.2kΩ, f = 20Hz to 20kHz	–	3	6	mV
Total Circuit Current	I_{tot}	AGC Circuit Off	–	21	30	mA
Input Impedance (EQ Amp)	$Z_{i(E)}$		–	100	–	kΩ
Input Impedance (Tone Amp)	$Z_{i(T)}$		–	100	–	kΩ

Pin Connection Diagram