ELECTRONICS, INC.
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NTE1882
Integrated Circuit
Module – AF Power Amp, 100W Min, Dual Power Supplies

Features:

- Compact packaging supports slimmer set designs
- Simpler heat sink design facilitates thermal design of slim stereo sets
- Current mirror circuit application reduces distortion to 0.08%.
- Supports addition of electronic circuits for thermal shutdown and load–short protection circuit as well as pop noise muting which occurs when the power supply switch is turned on and off

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

Maximum Supply Voltage, V_{CC}max . . . . . ±73V
Thermal Resistance, Junction–to–Case, R_{thJC} . . . . . 1.1°C/W
Junction Temperature, T_J . . . . . +150°C
Operating Substrate Temperature, T_C . . . . . +125°C
Storage Temperature Range, T_{stg} . . . . . –30° to +125°C
Available Time for Shorted Load (V_{CC} = ±51V R_L = 8Ω, f = 50Hz, P_O = 100W), t_s 1sec

Recommended Operating Conditions: (T_A = ±25°C unless otherwise specified)

Recommended Supply Voltage, V_{CC} . . . . . ±51V
Load Resistance, R_L 8Ω

Operating Characteristics: (T_A = ±25°C, V_{CC} = ±51V, R_L = 8Ω, VG = 40dB, Rg = 600Ω, 100k LPF ON, R_L (non–inductive)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	I_{CCO}	V_{CC} = ±61V	15	–	120	mA
Output Power	P_O	THD = 0.08%, f = 20Hz to 20kHz	100	–	–	W
Total Harmonic Distortion	THD	P_O = 1.0W, f = 1kHz	–	–	0.08	%
Frequency Response	f_L, f_H	P_O = 1.0W, +0dB, –3dB	–	20 to 50k	–	Hz
Input Resistance	r_i	P_O = 1.0W, f = 1kHz	–	55	–	kΩ
Output Noise Voltage	V_{NO}	V_{CC} = ±61V, R_{gm} = 10kΩ	–	–	1.2	mV_{rms}
Midpoint Voltage	V_N	V_{CC} = ±61V	–70	0	70	mV

Note 1 Output noise voltage represents the peak value on the rms scale (VTVM). The noise voltage waveform does not include the pulse noise.

Pin Connection Diagram
(Front View)