

NTE7031 Integrated Circuit Module – AF Power Amp, Single Channel, 100W Min

Features:

- Built-In Muting Circuit Reduces Pop On Noises

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

Maximum Supply Voltage, V_{CCmax}	$\pm 73\text{V}$
Thermal Resistance, Junction-to-Case, R_{thJC}	1.1°C/W
Junction Temperature, T_J	$+150^\circ\text{C}$
Operating Case Temperature, T_C	$+125^\circ\text{C}$
Storage Temperature Range, T_{stg}	-30° to $+125^\circ\text{C}$
Available Time for Shorted Load ($V_{CC} = \pm 51.0\text{V}$, $R_L = 8\Omega$, $f = 50\text{Hz}$, $P_O = 100\text{W}$), t_s	2sec

Recommended Operating Conditions: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Operating Voltage, V_{CC}	$\pm 51.0\text{V}$
Load Resistance, R_L	8Ω

Operating Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = \pm 51.0\text{V}$, $R_L = 8\Omega$, $R_g = 600\Omega$, $V_G = 40\text{dB}$, R_L : Non-Inductive Load unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	I_{CCO}	$V_{CC} = \pm 61\text{V}$	15	–	120	mA
Output Power	P_O	THD = 0.4%, $f = 20\text{Hz}$ to 20kHz	100	–	–	W
Total Harmonic Distortion	THD	$P_O = 1.0\text{W}$, $f = 1\text{kHz}$	–	–	0.4	%
Frequency Response	f	$P_O = 1.0\text{W}$, +0dB, –3dB	20 to 50k			Hz
Input Resistance	r_i	$P_O = 1.0\text{W}$, $f = 1\text{kHz}$	–	55	–	k Ω
Output Noise Voltage	V_{NO}	$V_{CC} = \pm 61\text{V}$, $R_g = 10\text{k}\Omega$	–	–	1.2	mVrms
Midpoint Voltage	V_N	$V_{CC} = \pm 61\text{V}$	–70	0	+70	mV

Pin Connection Diagram
(Front View)

