

NTE1798 Integrated Circuit Dual, AF PO, 6W/Ch

Features:

- High–Output, Dual–Channel AF Power IC:
 $P_O = 6W \times 2$, $V_{CC} = 25V$, $R_L = 8\Omega$, $f = 1kHz$
- Low Distortion: THD = 0.1%, $V_{CC} = 25V$, $R_L = 8\Omega$, $f = 1kHz$, $P_O = 2W$
- Minimum Number of External Components Required (No Bootstrap Capacitor Required)
- Low Pop Noise at Time of Power Switch ON/OFF
- High Ripple Rejection: 58dB Typ
- Wide Supply Voltage Range: 10V to 32V
- On–Chip Protection Against Abnormality (Thermal Shutdown, Overvoltage)

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

Maximum Supply Voltage, V_{CCmax}	35V
Maximum Output Current, I_{Opeak}	3.5A
Allowable Power Dissipation (With Heat Sink), P_{Dmax}	20W
Operating temperature Range, T_{opr}	-20° to $+75^\circ C$
Storage Temperature Range, T_{stg}	-40° to $+150^\circ C$

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

Recommended Supply Voltage, V_{CC}	25V
Operating Voltage Range, V_{CCopr}	10V to 32V
Recommended Load Resistance, R_L	8 Ω

Electrical Characteristics: ($T_A = +25^\circ C$, $V_{CC} = 25V$, $R_L = 8\Omega$, $f = 1kHz$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	I_{CCO}		25	45	90	mA
Voltage Gain	V_G		38	40	42	dB
Output Power	P_O	THD = 1%	5.0	6.0	–	W
Total Harmonic Distortion	THD	$P_O = 2W$	–	0.1	0.8	%
Output Noise Voltage	V_{NO}	$R_g = 10k\Omega$, BW = 20Hz to 20kHz	–	0.25	1.0	mV
Ripple Rejection	SVRR	$R_g = 10k\Omega$, $f_R = 100Hz$, $45V_R = 0dBm$	45	58	–	dB
Crosstalk	CT	$R_g = 10k\Omega$	45	60	–	dB
Channel Balance	VG		–	–	1.5	dB

Pin Connection Diagram (Front View)

