

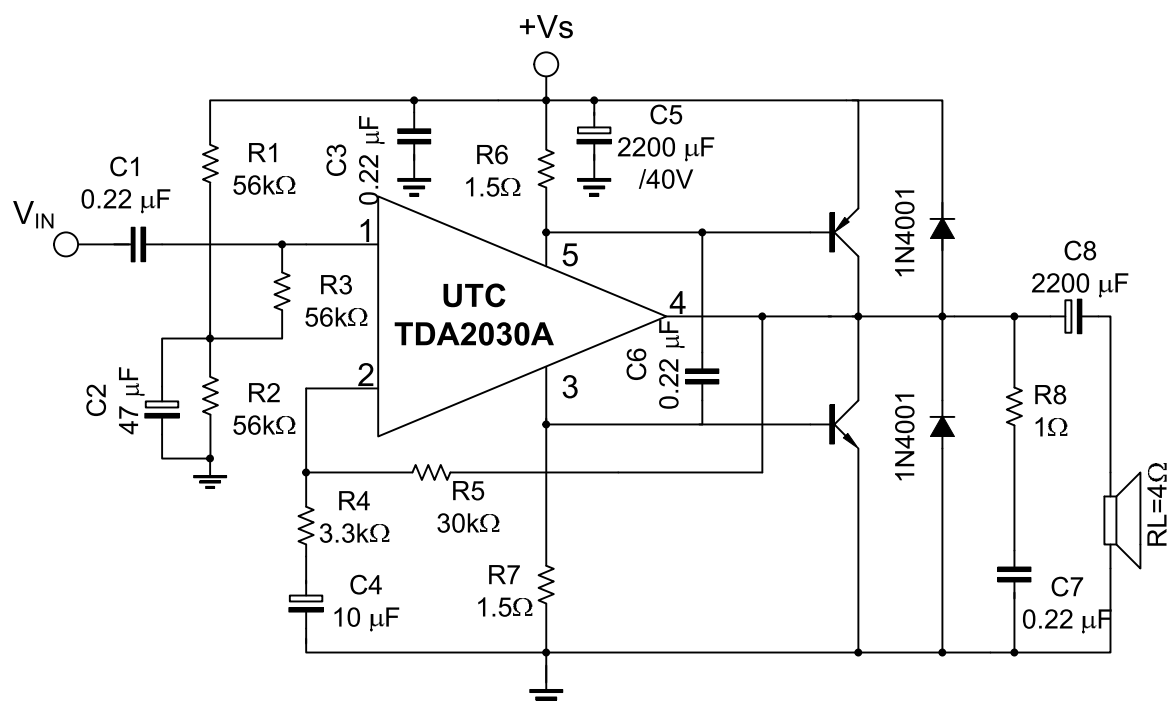


Fig. 1 Single supply high power amplifier

■ TYPICAL PERFORMANCE OF THE CIRCUIT OF FIG. 1

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Supply Voltage	V_s			36	44	V
Quiescent Drain Current	I_Q	$V_s=36V$		50		mA
Output Power	P_{OUT}	$d=0.5\%$, $R_L=4\Omega$ $f=40Hz$ to $15kHz$, $V_s=39V$		35		W
		$d=0.5\%$, $R_L=4\Omega$ $f=40Hz$ to $15kHz$, $V_s=36V$		28		
		$d=10\%$, $f=1kHz$, $R_L=4\Omega$, $V_s=39V$		44		
		$d=10\%$, $R_L=4\Omega$ $f=1kHz$, $V_s=36V$		35		
Voltage Gain	G_v	$f=1kHz$	19.5	20	20.5	dB
Slew Rate	SR			8		V/ μsec
Total Harmonic Distortion	d	$P_{OUT}=20W$, $f=1kHz$		0.02		%
		$P_{OUT}=20W$, $f=40Hz$ to $15kHz$		0.05		%
Input Sensitivity	V_{IN}	$G_v=20dB$, $P_{OUT}=20W$, $f=1kHz$, $R_L=4\Omega$		890		mV
Signal to Noise Ratio	S/N	$R_L=4\Omega$, $R_g=10k\Omega$ $B=curve A$, $P_{OUT}=25W$		108		dB
		$R_L=4\Omega$, $R_g=10k\Omega$ $B=curve A$, $P_{OUT}=4W$		100		