

5.8W AUDIO POWER AMPLIFIER.
CAR STEREO, CAR RADIO OUTPUT.

FEATURES

- Output Power
 - : $P_{OUT}=5.8W(Typ.)$ at $V_{CC}=13.2V$, $R_L=4\ \Omega$, $THD=10\%$
 - : $P_{OUT}=9.2W(Typ.)$ at $V_{CC}=13.2V$, $R_L=2\ \Omega$, $THD=10\%$
- Maximum Output Power
 - : $P_{OM}=9.5W(Typ.)$ at $V_{CC}=13.2V$, $R_L=4\ \Omega$
- Low Distortion : $THD=0.15\%$ at $P_{OUT}=1W$, $G_V=55dB$
 $THD=0.07\%$ at $P_{OUT}=1W$, $G_V=44dB$
- Wide Operating Supply Voltage Range : $V_{CC}=9 \sim 18V$
- Minimum Working Voltage : 9V
- Excessive Supply Voltage Protection Circuit.
- Current Limiting for Short Circuit Protection.
- Thermal Shut-down Circuit.

MAXIMUM RATINGS (Ta=25 °C)

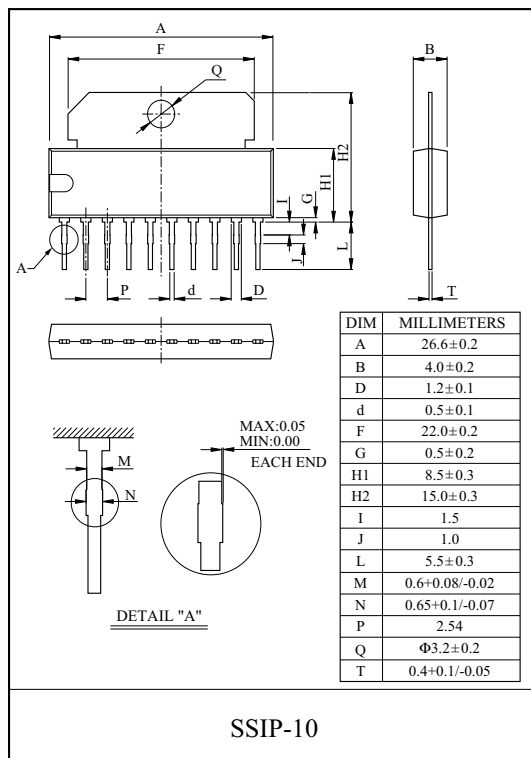
CHARACTERISTIC	SYMBOL	RATING	UNIT
Operating Supply Voltage	V_{CC}	18	V
Quiescent Supply Voltage	V_{CCQ}	25	V
Output Current (Peak)	$I_{O(peak)}$	4.5	A
Power Dissipation	P_D	7.5	W
Operating Temperature	T_{opr}	-20 ~ 75	°C
Storage Temperature	T_{stg}	-55 ~ 150	°C

ELECTRICAL CHARACTERISTICS

(Unless otherwise specified. $V_{CC}=12.5V$, $R_L=4\ \Omega$, $R_g=600\ \Omega$, $R_f=82\ \Omega$, $f=1kHz$, $T_a=25\ ^\circ C$)

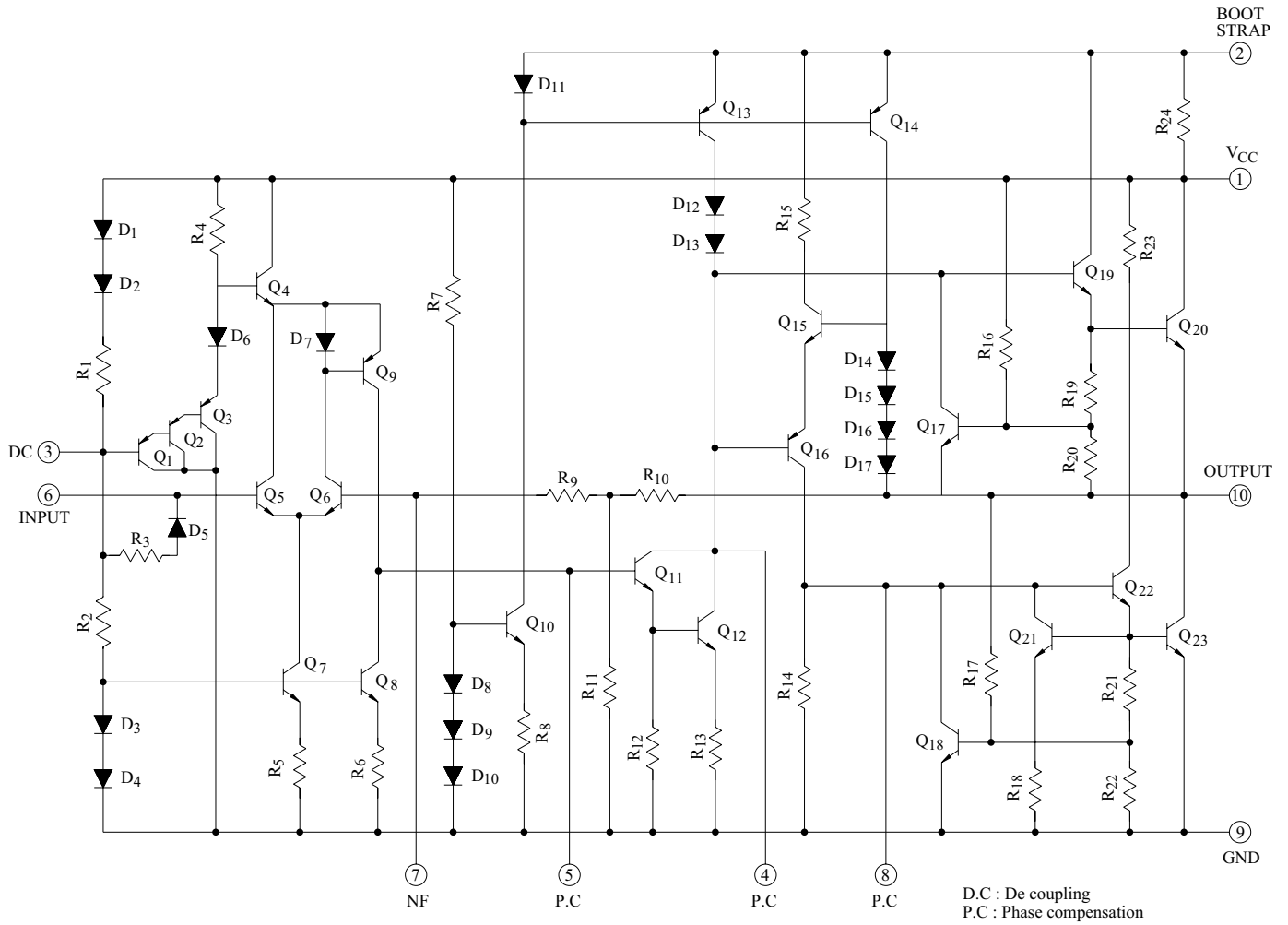
CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Quiescent Current	I_{CCQ}	-	-	-	-	60	mA
			$V_{CC}=18V$	-	-	80	
Output Power	P_{OUT}	-	$THD=10\%$	4.5	5	-	W
			$V_{CC}=13.2V$, $THD=10\%$	-	5.8	-	
			$V_{CC}=13.2V$, $R_L=2\ \Omega$, $THD=10\%$	-	9.2	-	
Maximum Output Voltage	P_{OM}	-	$V_{CC}=13.2V$	-	9.5	-	W
Total Harmonic Distortion	THD	-	$P_{OUT}=1W$	-	0.15	1.0	%
			$P_{OUT}=100mW$	-	0.2	1.0	
			$P_{OUT}=1W$, $R_L=2\ \Omega$	-	0.25	1.0	
Voltage Gain (Note)	G_V	-	$V_{IN}=2.45mV_{rms}$	52	-	58	dB
Input Resistance	R_{IN}	-	$V_{OUT}=2V_{rms}$	30	40	-	k Ω
Output Noise Voltage	V_{NO}	-	$R_g=10k\ \Omega$, $BW=50 \sim 20kHz$	-	-	3.5	mV

Note : In regard to the value of voltage gain (closed loop voltage), it is possible to be classified.

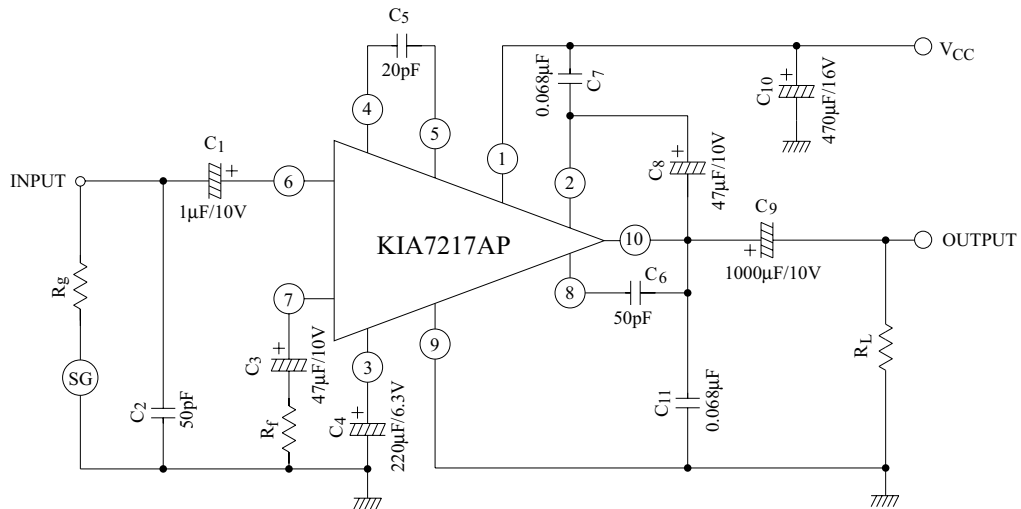


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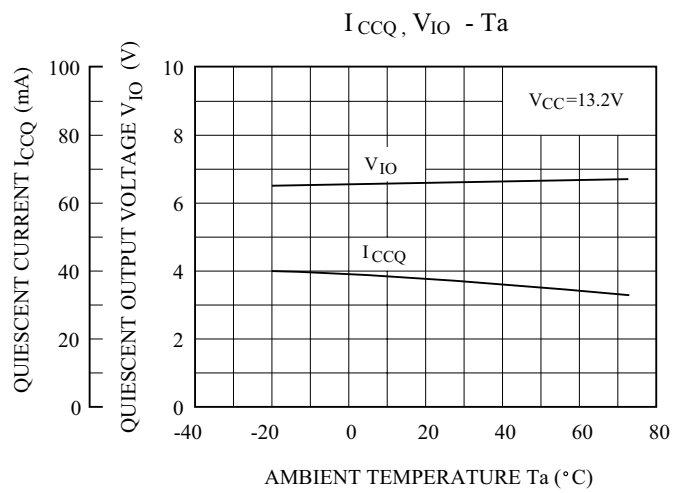
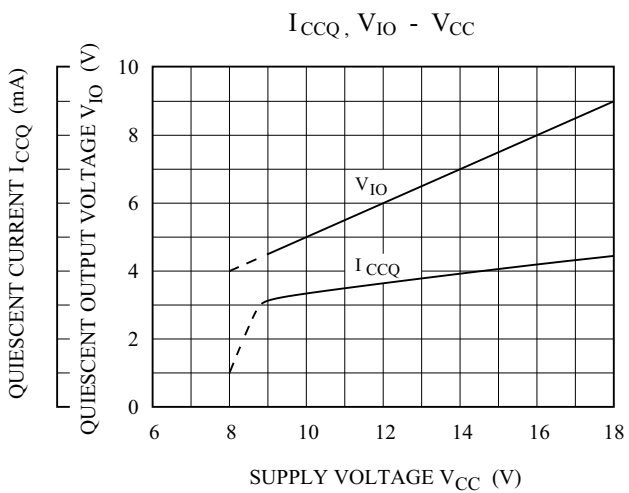
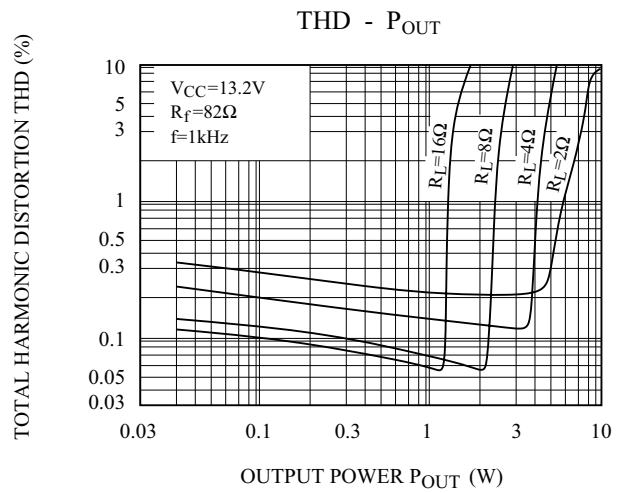
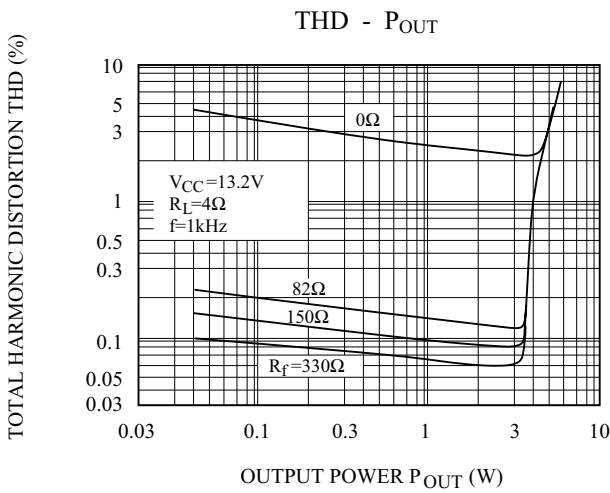
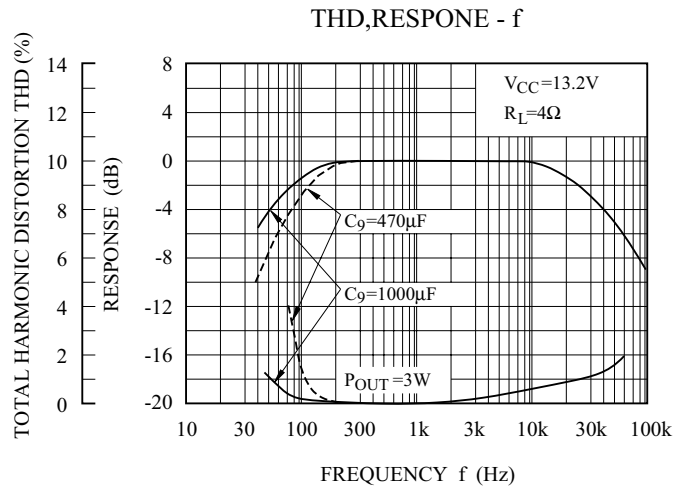
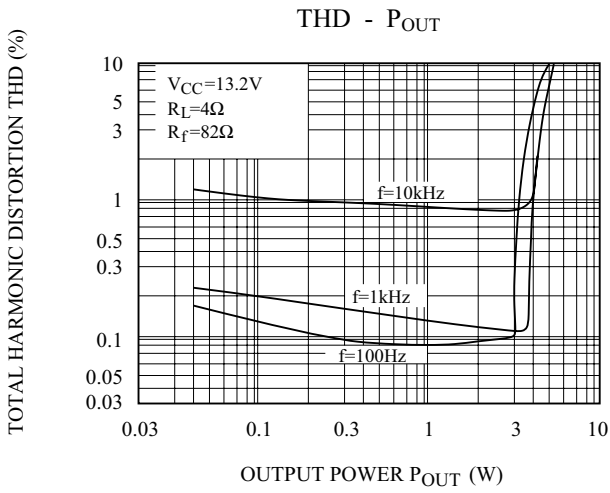
EQUIVALENT CIRCUIT



TEST AND APPLICATION CIRCUIT

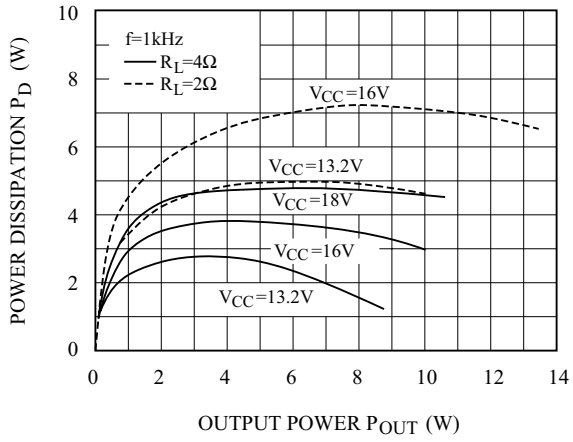


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$P_D - P_{OUT}$



$P_D - T_a$

