

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)

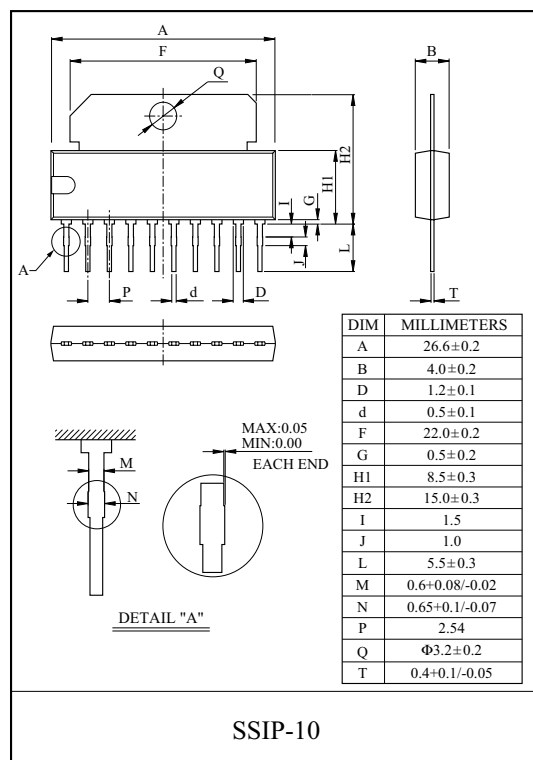
CHARACTERISTIC	SYMBOL	RATING	UNIT
Operating Supply Voltage	$V_{CC}$	18	V
Quiescent Supply Voltage	$V_{CCQ}$	25	V
Output Current (Peak)	$I_{O(peak)}$	4.5	A
Power Dissipation	$P_D$	7.5	W
Operating Temperature	$T_{opr}$	-20 ~ 75	°C
Storage Temperature	$T_{stg}$	-55 ~ 150	°C

### ELECTRICAL CHARACTERISTICS

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

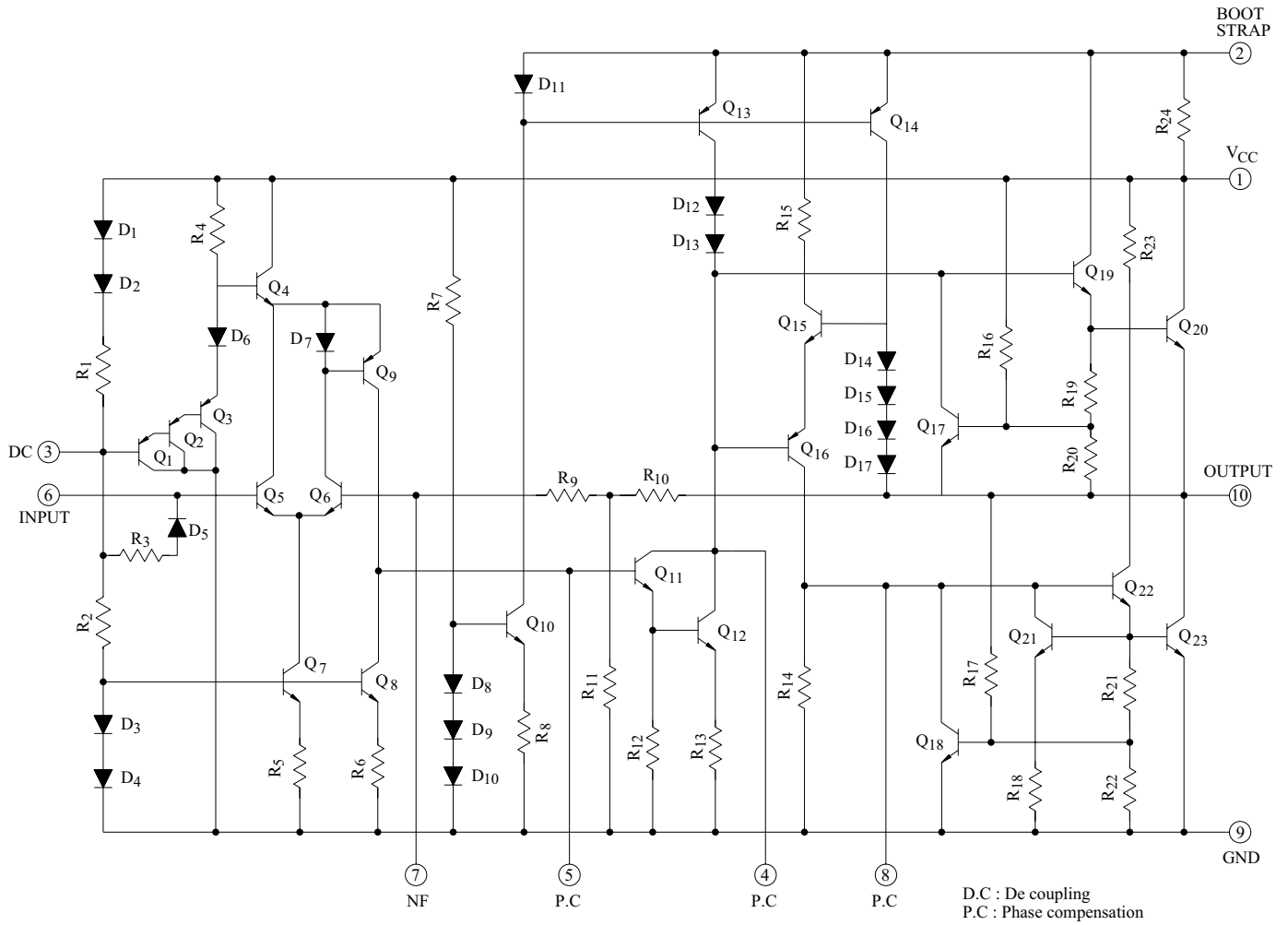
CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Quiescent Current	$I_{CCQ}$	-	-	-	-	60	mA
			$V_{CC}=18V$	-	-	80	
Output Power	$P_{OUT}$	-	THD=10%	4.5	5	-	W
			$V_{CC}=13.2V$ , THD=10%	-	5.8	-	
			$V_{CC}=13.2V$ , $R_L=2\ \Omega$ , THD=10%	-	9.2	-	
Maximum Output Voltage	$P_{OM}$	-	$V_{CC}=13.2V$	-	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 $\Omega$
Output Noise Voltage	$V_{NO}$	-	$R_g=10k\ \Omega$ , BW=50 ~ 20kHz	-	-	3.5	mV

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

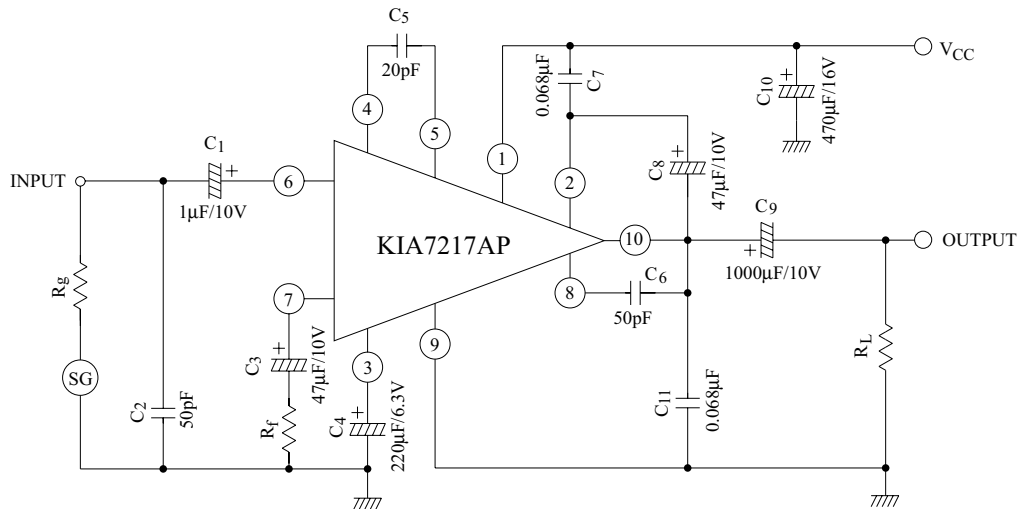


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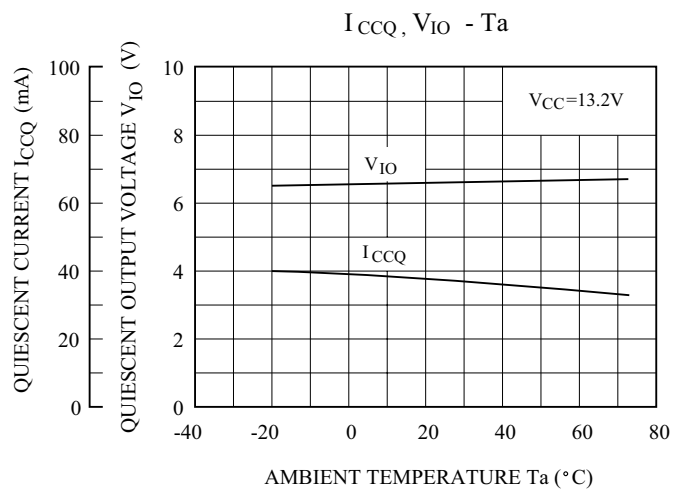
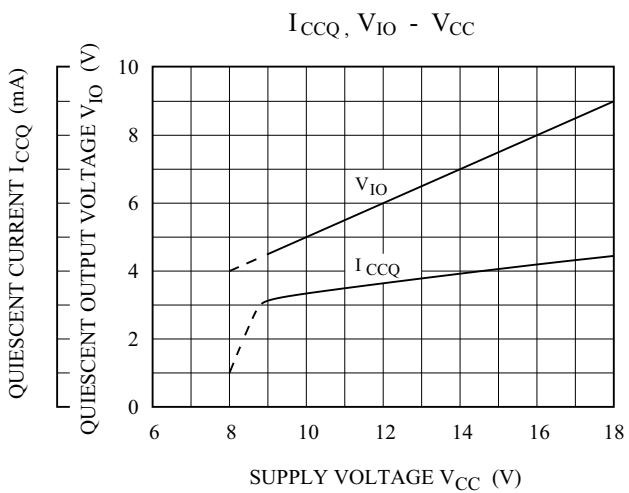
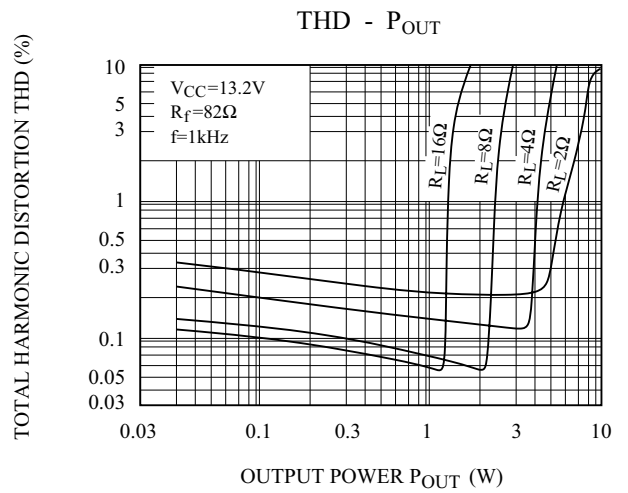
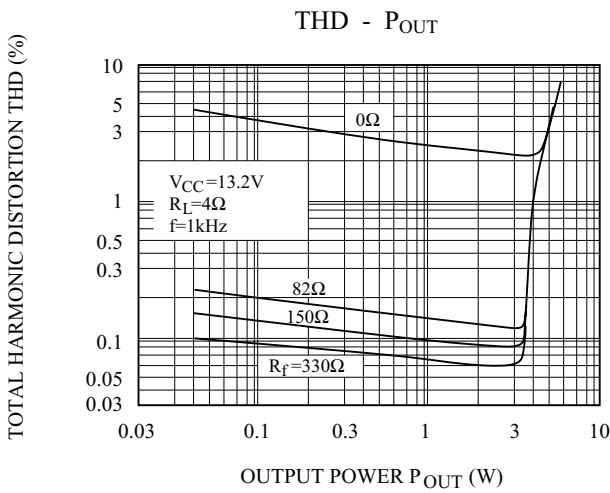
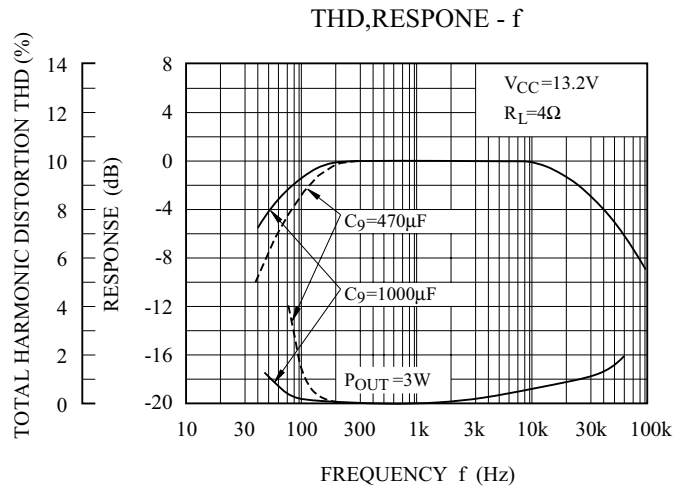
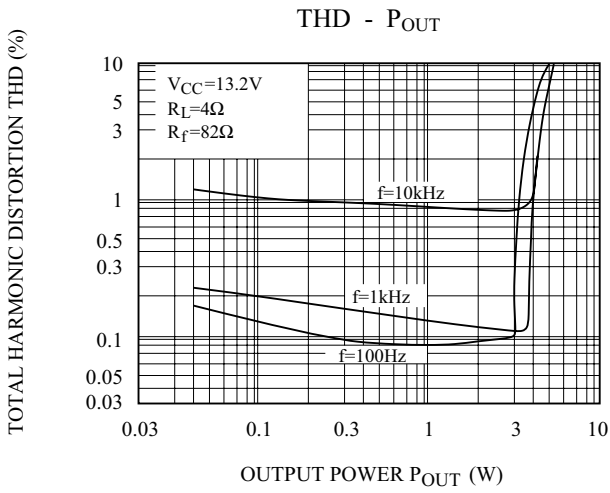
## EQUIVALENT CIRCUIT



## TEST AND APPLICATION CIRCUIT

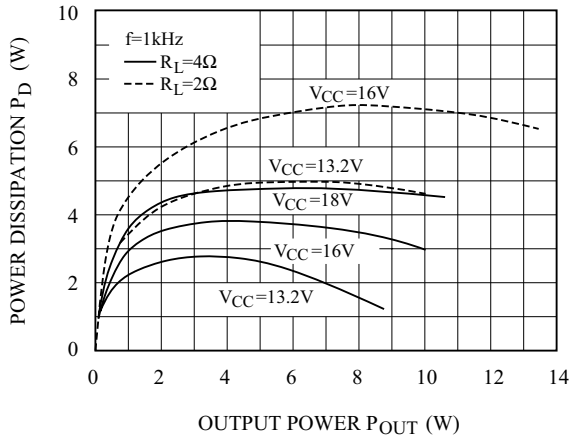


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$P_D - P_{OUT}$



$P_D - T_a$

