

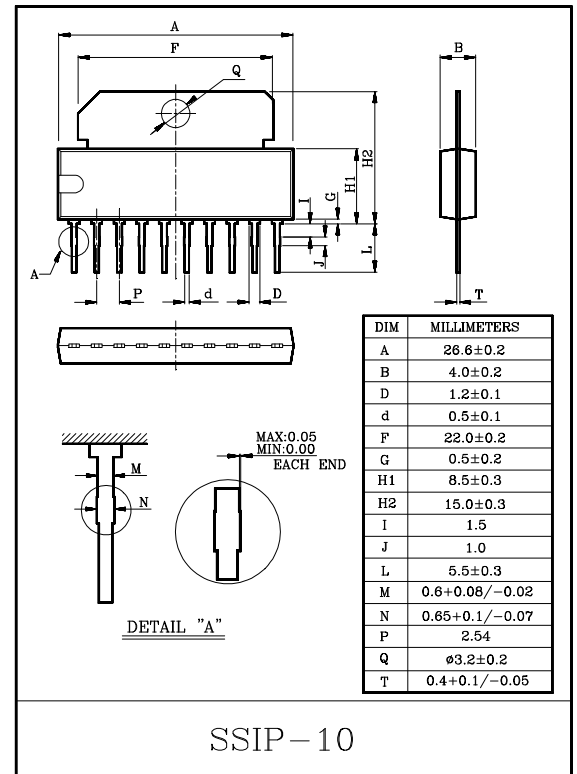
5.8W AUDIO POWER AMPLIFIER.
CAR STEREO, CAR RADIO OUTPUT.

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 ($T_a=25^\circ C$)

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}	$-20\sim 75$	$^\circ C$
Storage Temperature	T_{stg}	$-55\sim 150$	$^\circ C$



ELECTRICAL CHARACTERISTICS

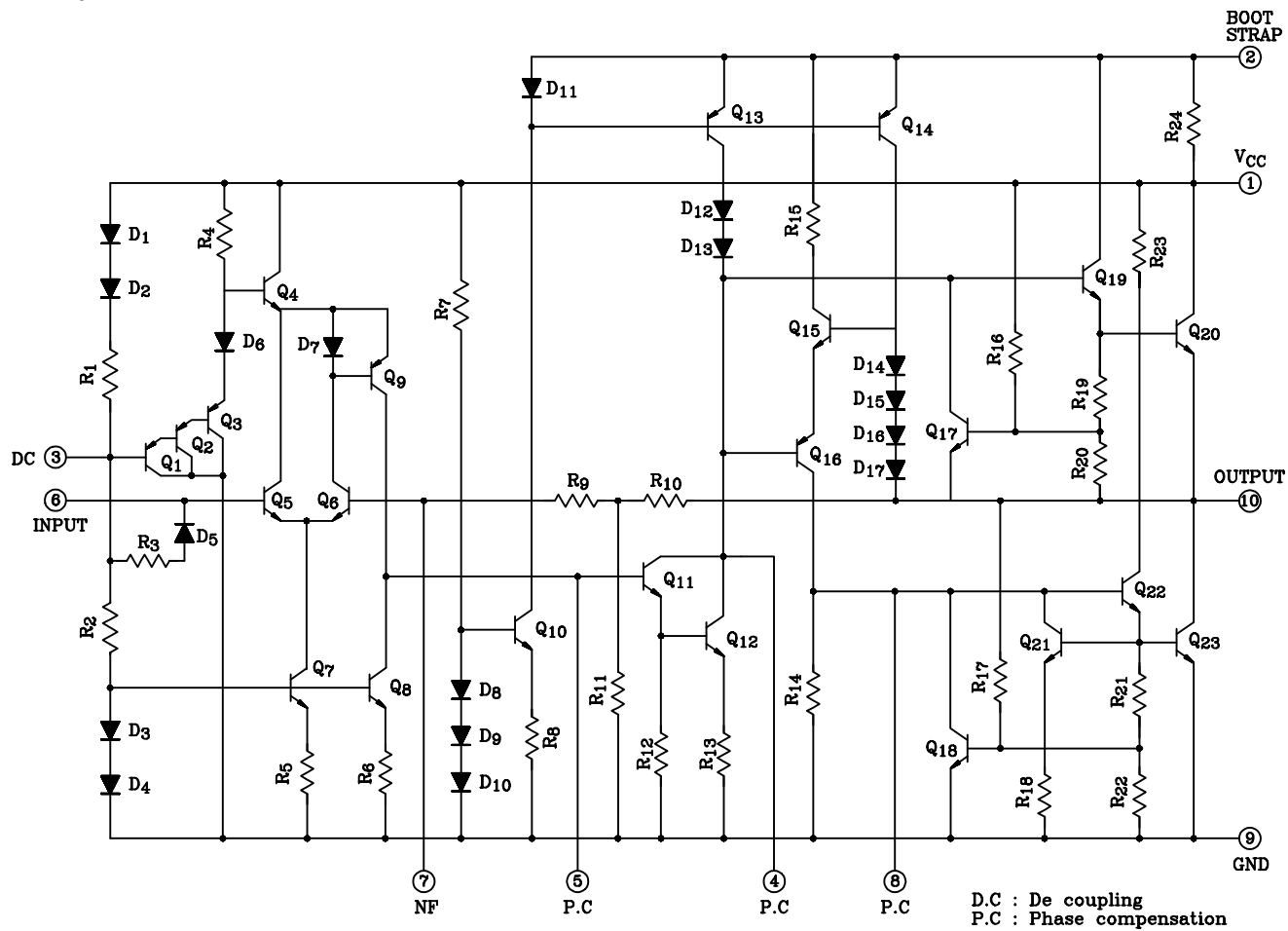
(Unless otherwise specified. $V_{CC}=12.5V$, $R_L=4\Omega$, $R_g=600\Omega$, $R_f=82\Omega$, $f=1kHz$, $T_a=25^\circ C$)

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.

KIA7217AP

EQUIVALENT CIRCUIT



TEST AND APPLICATION CIRCUIT

