

1.2W DUAL AUDIO POWER AMPLIFIER

KIA6269P is dual audio power amplifier designed for the portable radio cassette tape recorder.

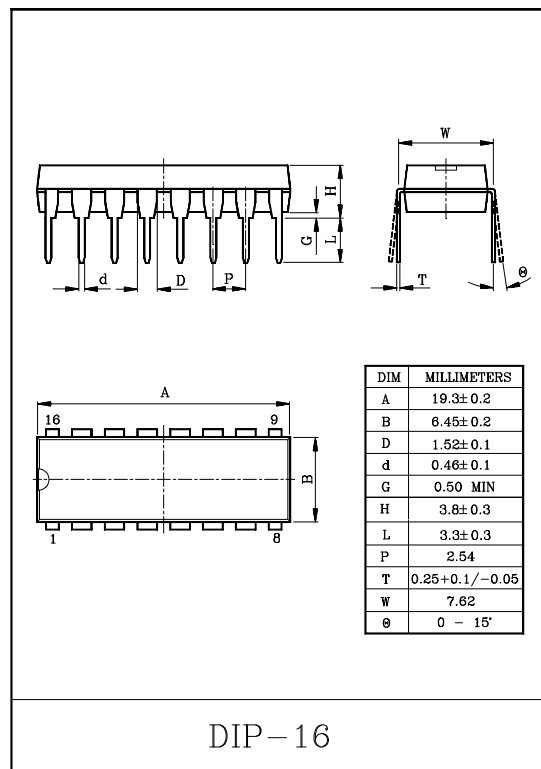
FEATURES

- High output power : $P_{OUT}=1.0W$ (Typ.)
($V_{CC}=6V$, $R_L=4\Omega$, $f=1kHz$, THD=10%).
- Built-in thermal shut down protection circuit.
- Small pop noise at power supply ON.
- Soft clip.
- Wide operating supply voltage range : $V_{CC}=4.5\sim 9.0V$.

MAXIMUM RATINGS ($T_a=25^\circ C$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V_{CC}	14	V
Power Dissipation (Note) (Package Limitation)	P_D	3.6	W
Operating Temperature	T_{opr}	$-25\sim 75$	$^\circ C$
Storage Temperature	T_{stg}	$-55\sim 150$	$^\circ C$

Note : Value for mounting on PC board with Cu Fin.
(Refer to P_D - T_a curve)



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ELECTRICAL CHARACTERISTICS

(Unless otherwise specified, $V_{CC}=6V$, $f=1kHz$, $R_L=4\Omega$, $R_g=600\Omega$, $T_a=25^\circ C$)

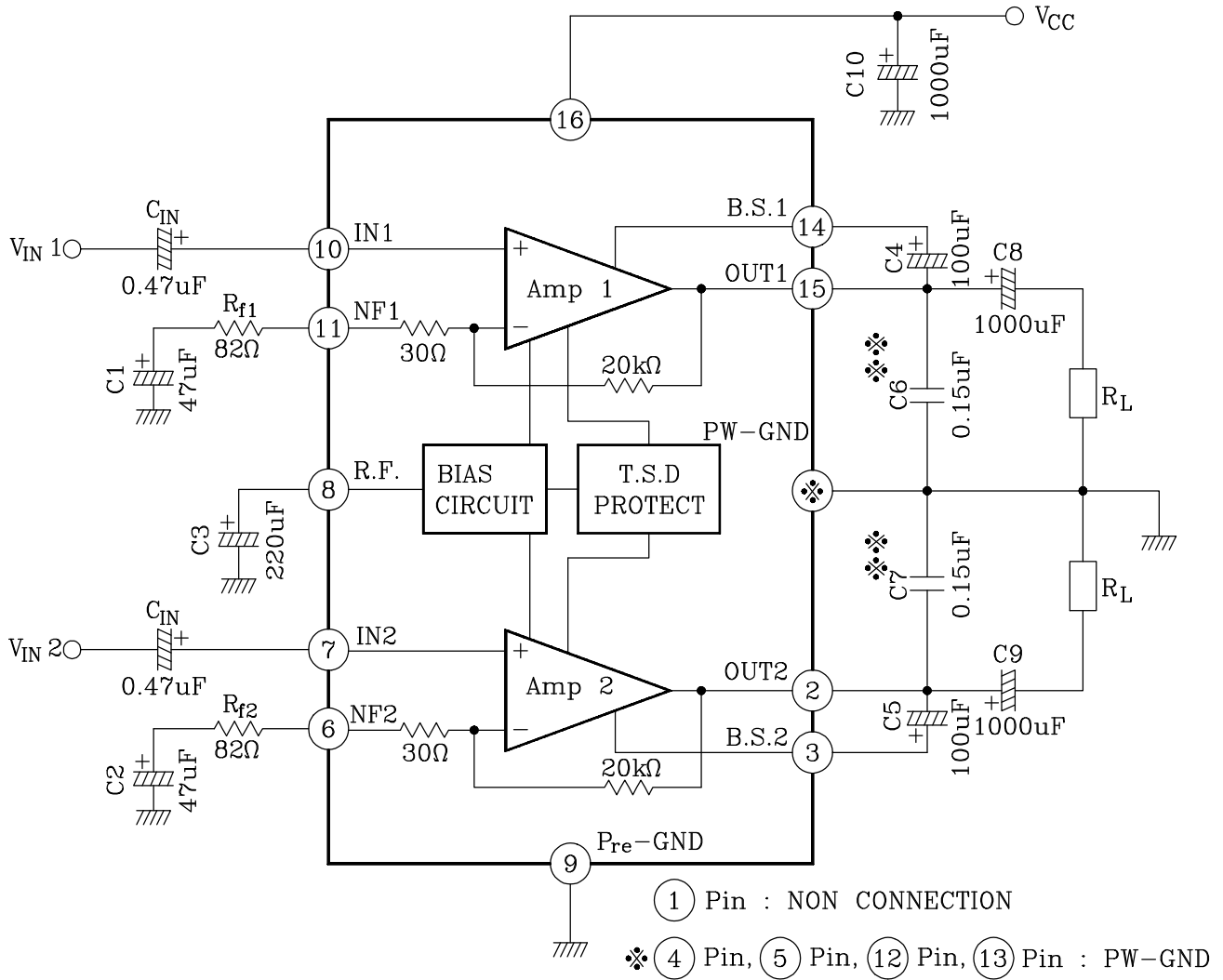
CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Quiescent Current	I_{CCQ}	—	$V_{IN}=0V$	—	30	55	mA
Output Power	$P_{OUT(1)}$	—	THD=10%	0.7	1.0	—	W
	$P_{OUT(2)}$		$R_L=3\Omega$, THD=10%	—	1.2	—	
	$P_{OUT(3)}$		$R_L=8\Omega$, THD=10%	—	0.62	—	
	$P_{OUT(4)}$		$V_{CC}=7.5V$, $R_L=8\Omega$, THD=10%	—	0.96	—	
Total Harmonic Distortion	THD	—	$P_{OUT}=0.25W$, $G_V=45dB$	—	0.15	1.0	%
Voltage Gain	$G_V(1)$	—	$R_f=82\Omega$, $V_{OUT}=0dBm$	43	45	47	dB
	$G_V(2)$		$R_f=0\Omega$, $V_{OUT}=0dBm$	—	56.5	—	
Cross Talk	C.T	—	$V_{OUT}=0dBm$	—	−60	—	dB
Ripple Rejection Ratio	R.R	—	$f_{RIP}=100Hz$, $V_{RIP}=245mV_{rms}$	—	−55	−40	dB
Output Noise Voltage	V_{NO}	—	$R_g=10k\Omega$, $G_V=45dB$ $BW=20Hz \sim 20kHz$	—	0.4	0.7	mV_{rms}
Input Resistance	R_{IN}	—	—	—	30	—	$k\Omega$
Input Offset Voltage	V_7, V_{10}	—	—	—	30	—	mV

TYPICAL DC VOLTAGE OF EACH TERMINAL ($V_{CC}=6V$, $T_a=25^\circ C$, Test Circuit)

TERMINAL NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
DC VOLTAGE(V)	NC	3.0	5.75	0	0	0.65	0.03	5.95	0	0.03	0.65	0	0	5.75	3.0	6.0

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BLOCK DIAGRAM & TEST CIRCUIT



※※ For C6 and C7, it is advised to use polyester film capacitor having superior quality in the characteristics of high frequency and temperature.