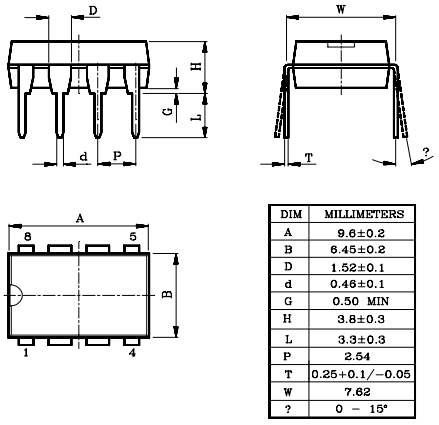
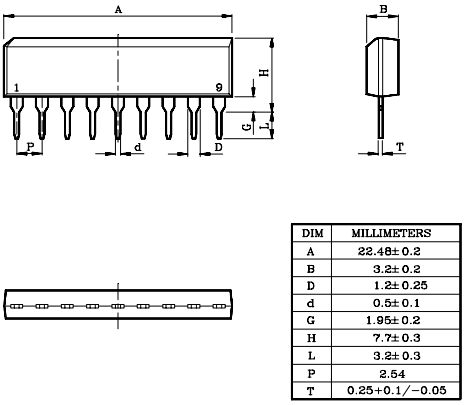
DUAL PRE-AMPLIFIER

- Dual pre amplifier for car or home stereo use.
- High voltage gain : G_{VO}=100dB(Typ.) at f=1kHz.
- Excellent channel separation and high ripple rejection.
  : CHsep=65dB(Typ.)
  (f=10kHz, Rg=2.2kΩ, Vout=0dBm)
  : R.R=50dB(Typ.)
- Low noise : V_{NI}=1.0μV_{rms}(Typ.)
  at Rg=2.2kΩ, Bw=20Hz~20kHz.
- Wide operating supply voltage range.
  : V_{CC}=6~16V (Ta=25℃)



DIM	MILLIMETERS
A	9.6±0.2
B	6.45±0.2
D	1.52±0.1
d	0.46±0.1
G	0.50 MIN
H	3.8±0.3
L	3.3±0.3
P	2.54
T	0.25+0.1/−0.05
W	7.62
?	0 ~ 15°

DIP-8



DIM	MILLIMETERS
A	22.48± 0.2
B	3.2± 0.2
D	1.2± 0.25
d	0.5± 0.1
G	1.95± 0.2
H	7.7± 0.3
L	3.2± 0.3
P	2.54
T	0.25+0.1/−0.05

SIP-9

MAXIMUM RATINGS (Ta=25℃)

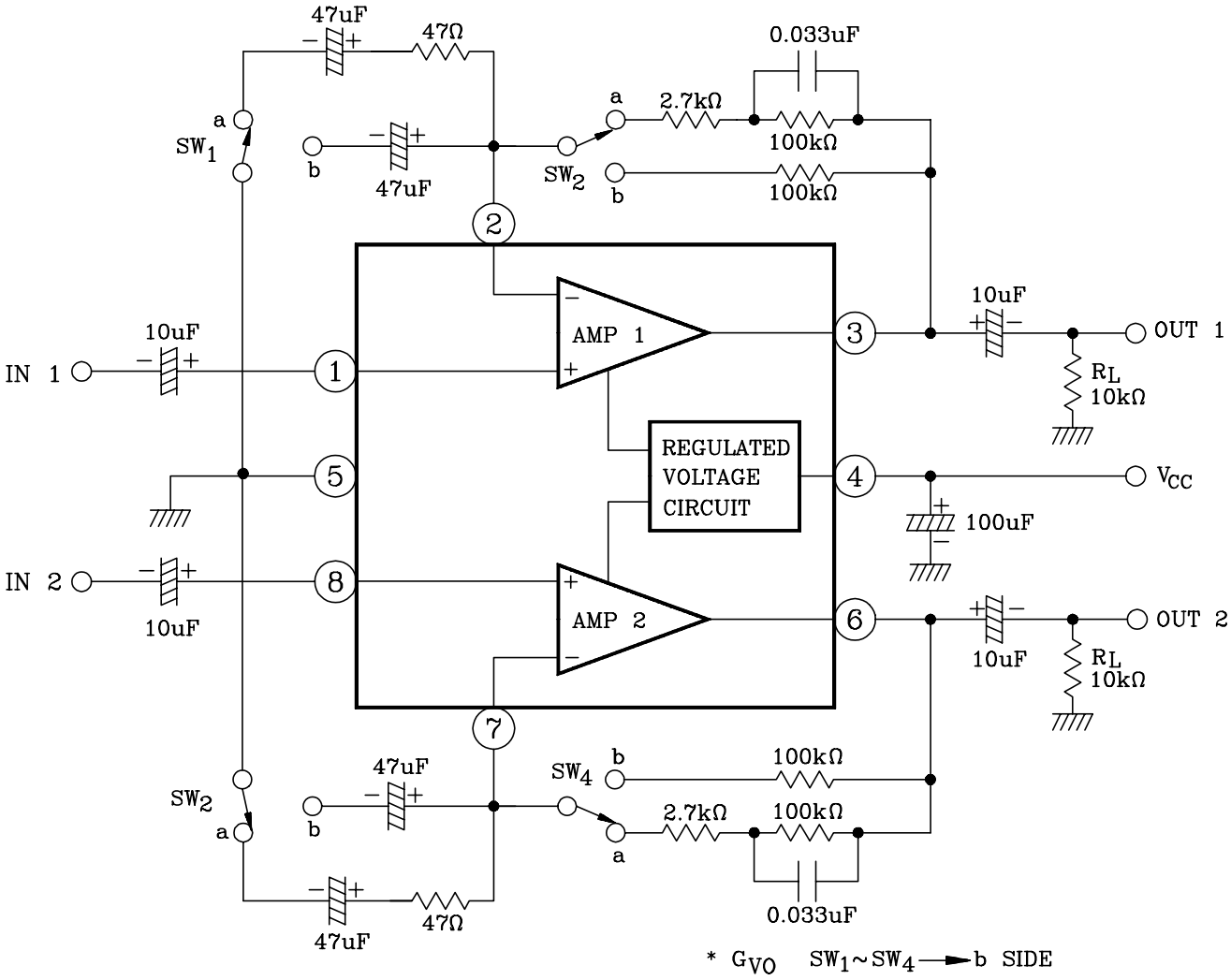
CHARACTERISTIC		SYMBOL	RATING	UNIT
Supply Voltage		Vcc	16	V
Power Dissipation (Note)	KIA6225P	P_D	600	mW
	KIA6225S		700	
Operating Temperature		T_{opr}	-30~85	℃
Storage temperature		T_{stg}	-55~150	℃

Note; Derated above Ta=25℃ in the proportion of 5.6mW/℃2 for KIA6225S, and of 4.8mW/℃ for KIA6225P.

ELECTRICAL CHARACTERISTICS
(Unless otherwise specified, Vcc=6V, f=1kHz, Rg=600Ω, R_L=10kΩ, Ta=25℃)

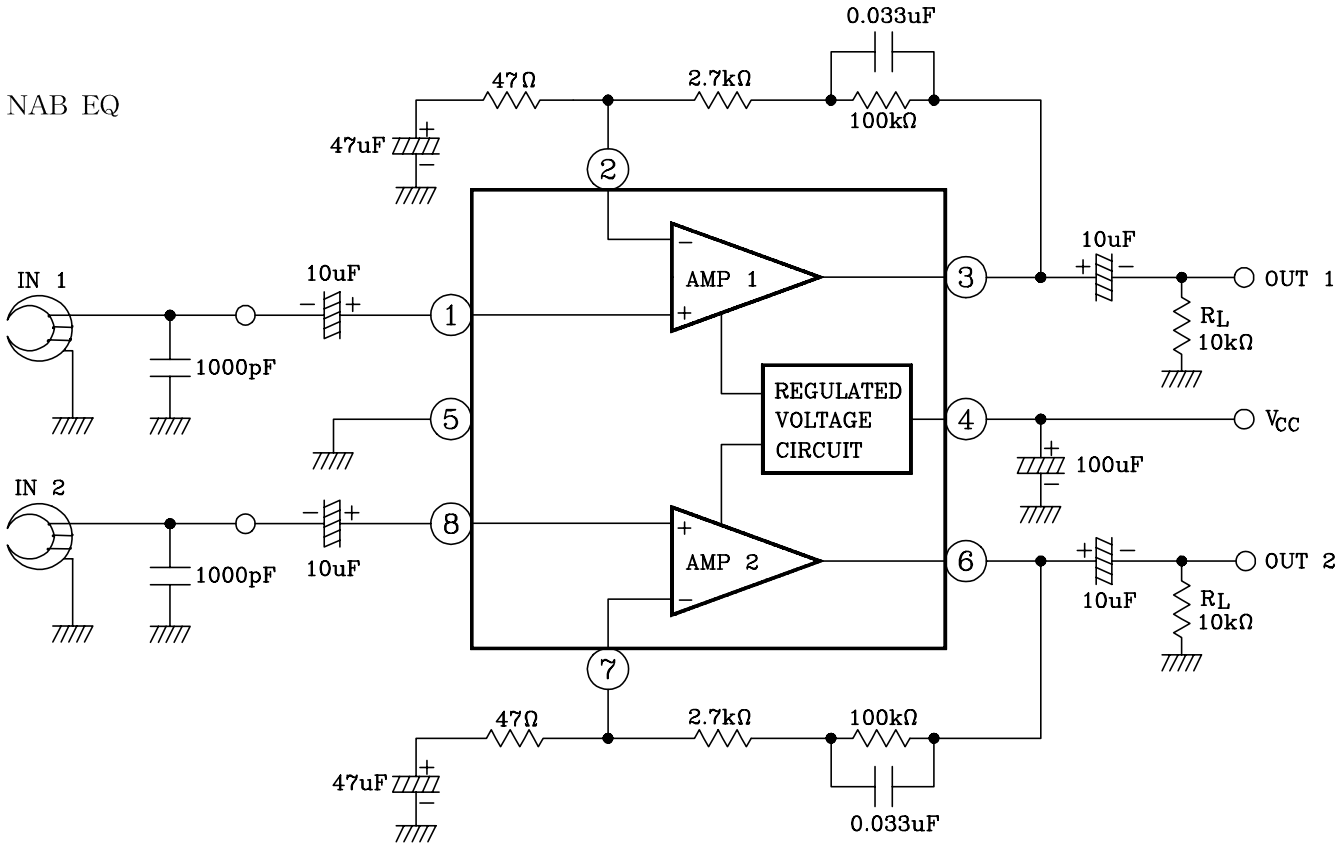
CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Current	Icc	-	V_{IN}=0	-	3	6	mA
Voltage Gain	Gvo	-	V_{OUT}=0dBm	75	100	-	dB
	Gv	-	V_{OUT}=0dBm	38.5	41.5	44.5	
Maximum Output Voltage	V_{OM}	-	THD=1%	1.0	1.8	-	V_{rms}
Equivalent Input Noise Voltage	V_{NI}	-	Rg=2.2kΩ, BPF=20Hz~20kHz	-	1.0	1.7	μV_{rms}
Input Resistance	R_{IN}	-	-	50	150	-	kΩ
Channel Separation	CHsep	-	f=10kHz, V_{OUT}=0dBm	-	65	-	dB
Ripple Rejection	R.R	-	f=100Hz, Rg=2.2kΩ	-	50	-	dB
Total Harmonic Distortion	THD	-	V_{OUT}=0dBm	-	0.04	0.25	%

TEST CIRCUIT

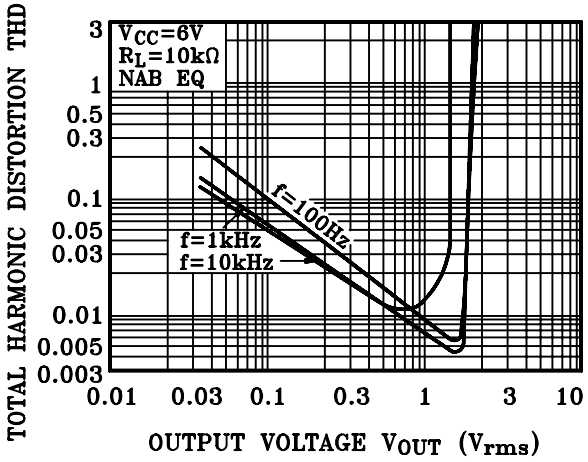


* Pin ⑨ : N.C

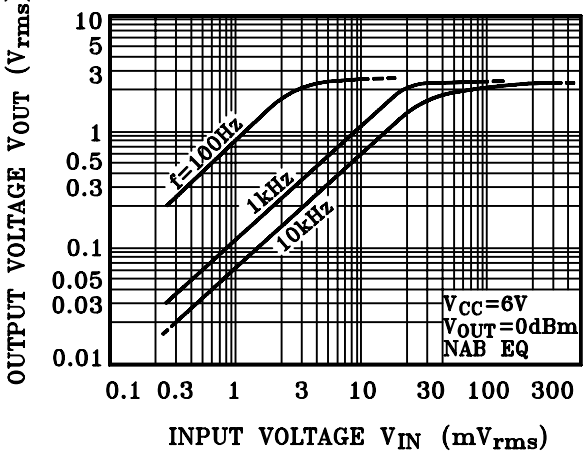
APPLICATION CIRCUIT



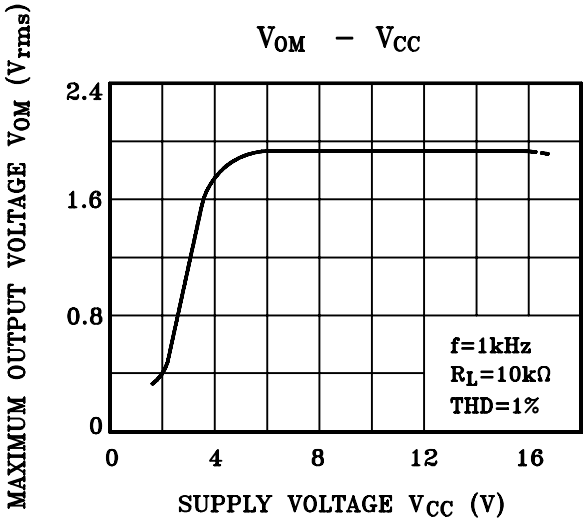
THD – V_{OUT}



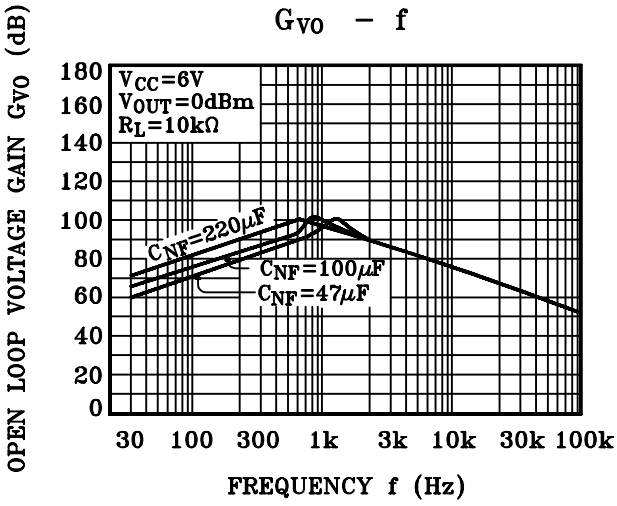
V_{OUT} – V_{IN}



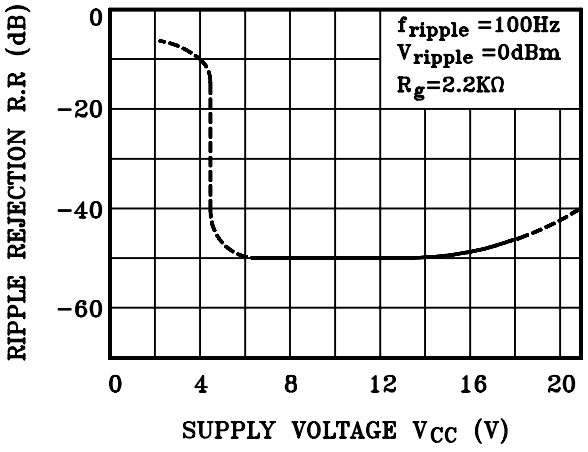
V_{OM} – V_{CC}



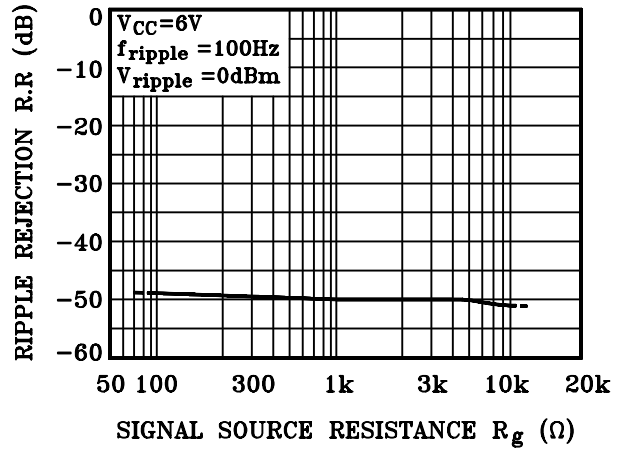
G_{VO} – f



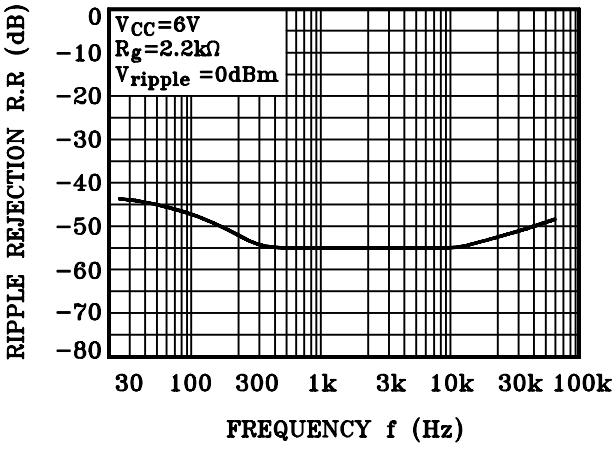
R.R – V_{CC}



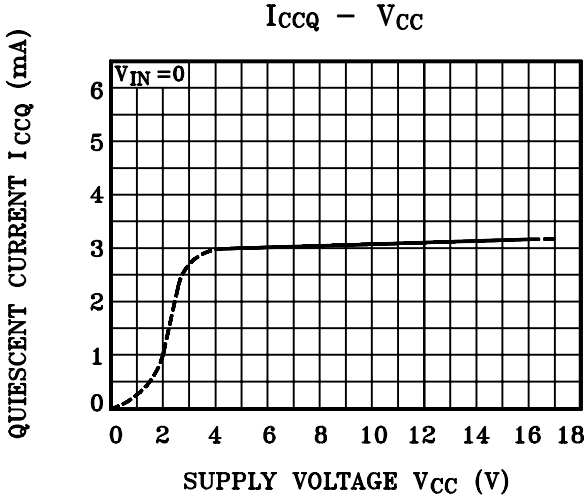
R.R – R_g



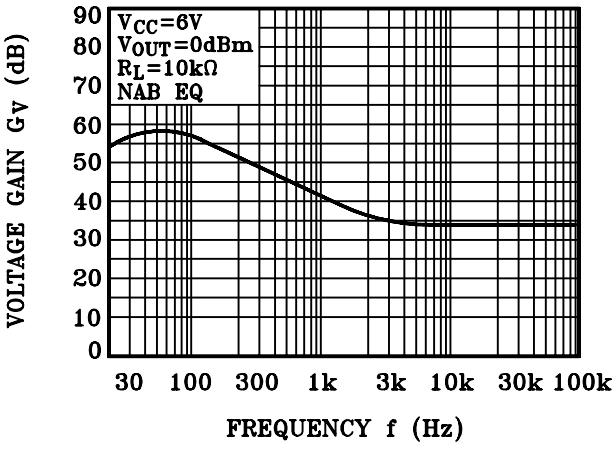
R.R – f



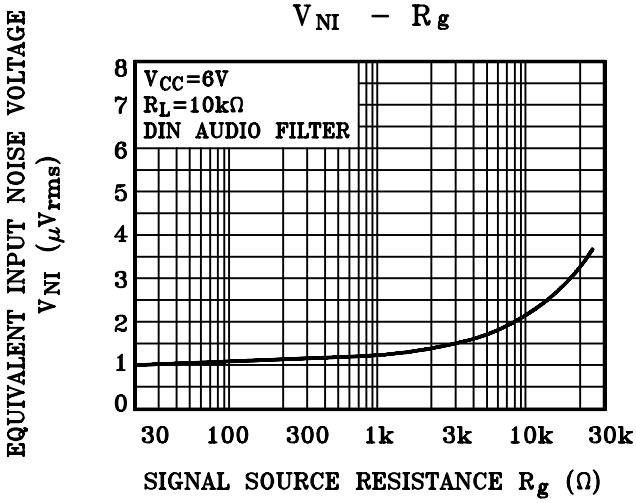
I_{CCQ} – V_{CC}



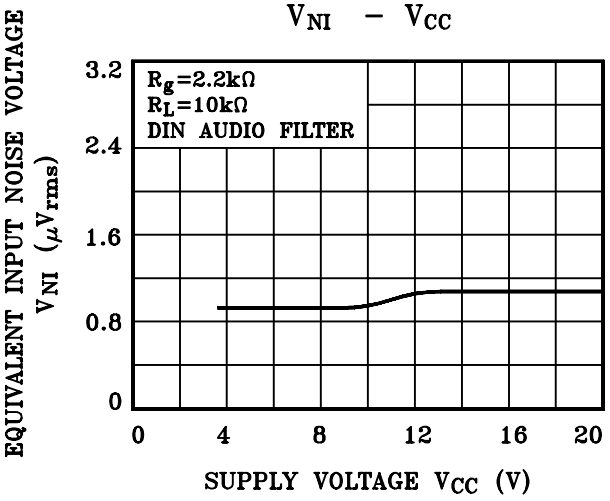
G_V – f



V_{NI} – R_g



V_{NI} – V_{CC}



CH_{sep} – f