



UNISONIC TECHNOLOGIES CO.,

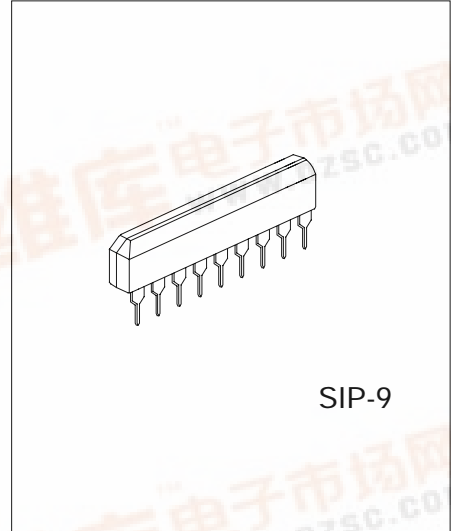
A6225

LINEAR INTEGRATED CIRCUIT

DUAL PRE-AMPLIFIER

■ FEATURES

- * Dual pre amplifier for car or home stereo use.
- * High voltage gain: $G_{VO} = 100\text{dB}$ (Typ.) at $f = 1\text{kHz}$.
- * Excellent channel separation and high ripple rejection
 : $CS = 65\text{dB}$ (Typ.)
 ($f = 10\text{kHz}$, $R_G = 2.2\text{k}\Omega$, $V_{OUT} = 0\text{dBm}$)
 : $RR = 50\text{dB}$ (Typ.)
- * Low noise: $V_{NI} = 1.0\mu\text{V}$ (Typ.) at $R_G = 2.2\text{k}\Omega$, $Bw = 20\text{Hz} \sim 20\text{kHz}$
- * Wide operating supply voltage range: $V_{CC} = 6 \sim 16\text{V}$ ($T_a = 25^\circ\text{C}$)



SIP-9

*Pb-free plating product number: A6225L

■ ORDERING INFORMATION

Order Number		Package	Packing
Normal	Lead free		
A6225-G09-T	A6225L-G09-T	SIP-9	Tube



■ ABSOLUTE MAXIMUM RATINGS (Ta = 25)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V _{CC}	16	V
Power Dissipation (Note)	P _D	700	mW
Operating Temperature	T _{OPR}	0 ~ +70	
Storage Temperature	T _{STG}	-40 ~ +150	

Note 1. Derated above Ta = 25 in the Proportion of 5.6mW/

- Absolute maximum ratings are stress ratings only and functional device operation is not implied. The device could be damaged beyond Absolute maximum ratings.
- The device is guaranteed to meet performance specifications within 0 ~70 operating temperature range and assured by design from -20 ~85 .

■ ELECTRICAL CHARACTERISTICS

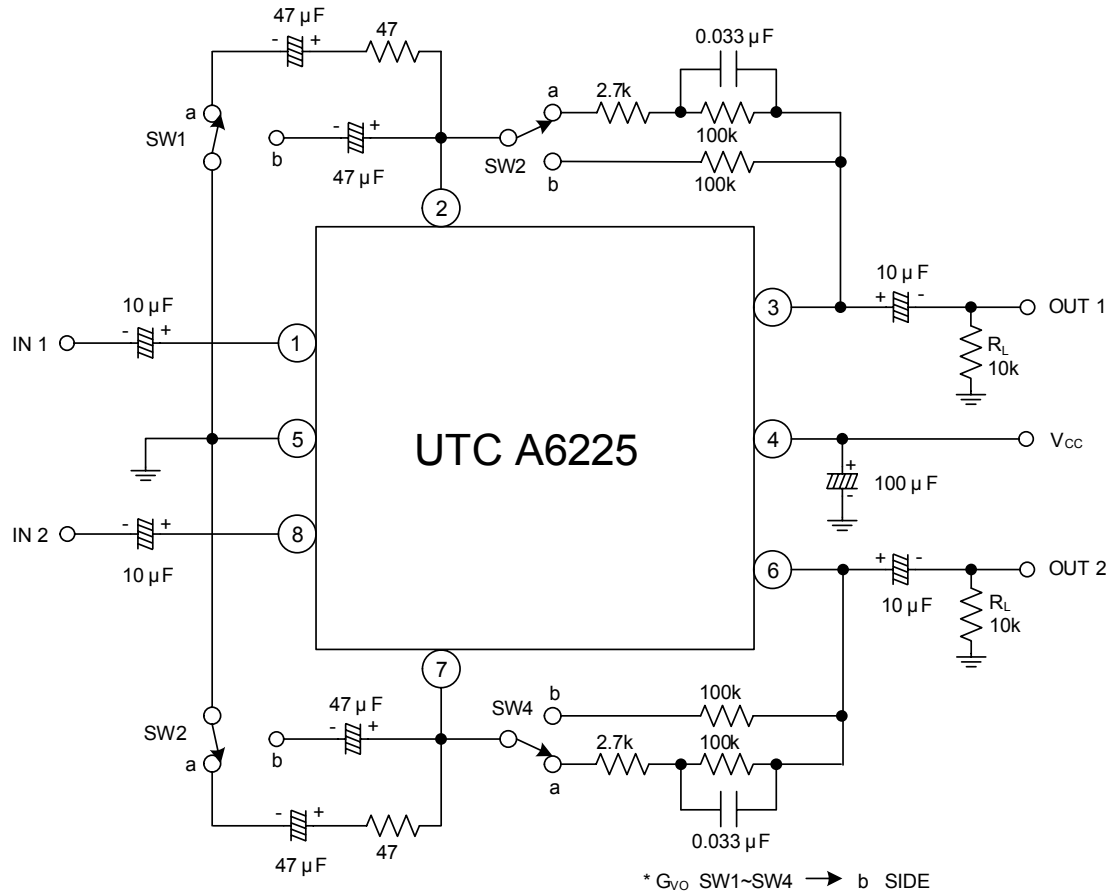
(Ta=25 , V_{CC} 6V, R_G=600Ω, R_L=10kΩ, f=1kHz, unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Supply Current	I _{CC}	V _{IN} = 0V		3	6	mA
Voltage Gain	OPEN	G _{VO} V _{OUT} = 0dBm	75	100		dB
	CLOSED	G _{VC} V _{OUT} = 0dBm	38.5	41.5	44.5	
Maximum Output Voltage	V _{O(MAX)}	THD = 1%	1.0	1.8		V
Equivalent Input Noise Voltage	V _{IN(INO)}	R _G = 2.2kΩ, BPF = 20Hz ~ 20kHz		1.0	1.7	μV
Input Resistance	R _{IN}		50	150		kΩ
Channel Separation	CS	f = 10kHz, V _{OUT} = 0dBm		65		dB
Ripple Rejection	RR	f = 10kHz, R _G = 2.2kΩ		50		dB
Total Harmonic Distortion	THD	V _{OUT} = 0dBm		0.04	0.25	%

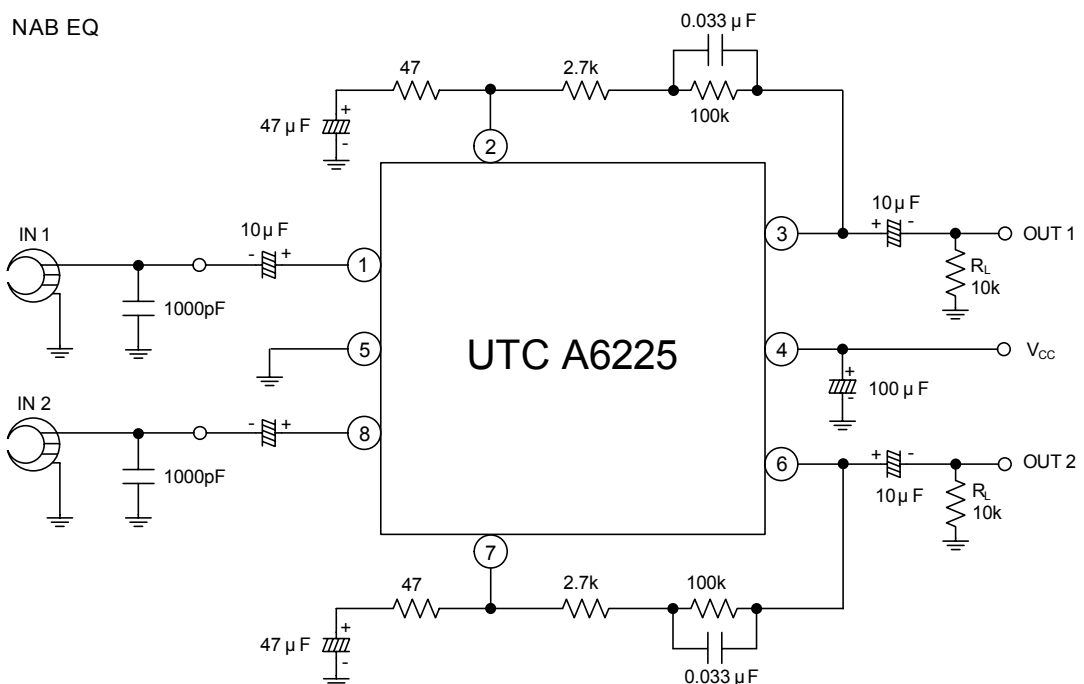
A6225

LINEAR INTEGRATED CIRCUIT

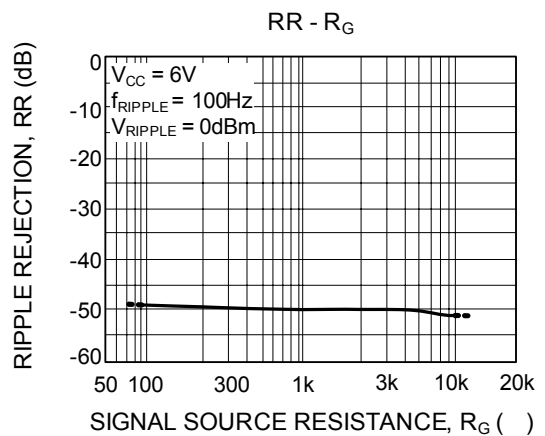
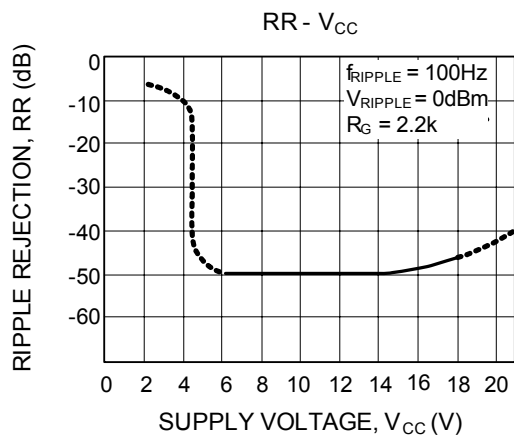
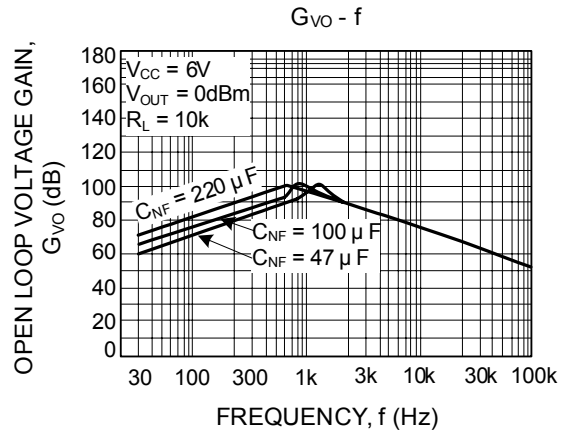
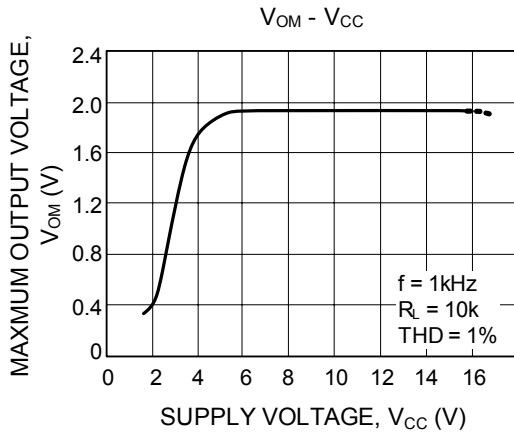
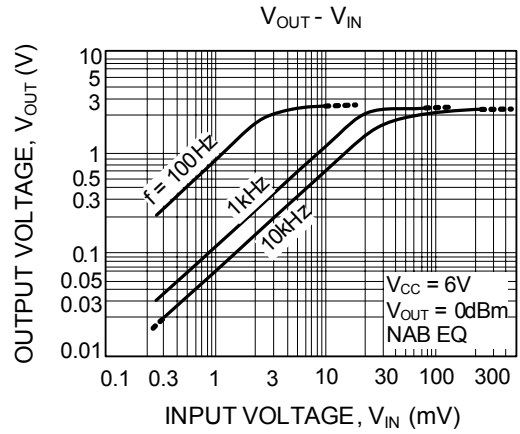
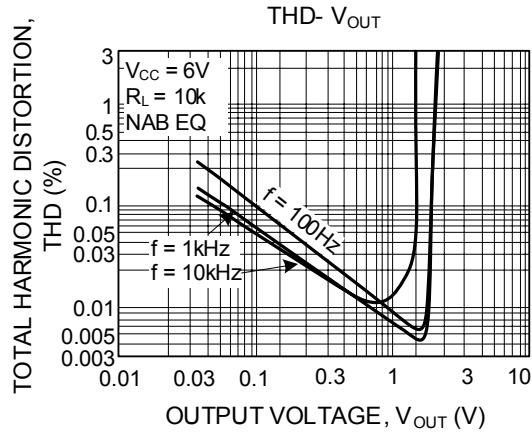
■ TEST CIRCUIT



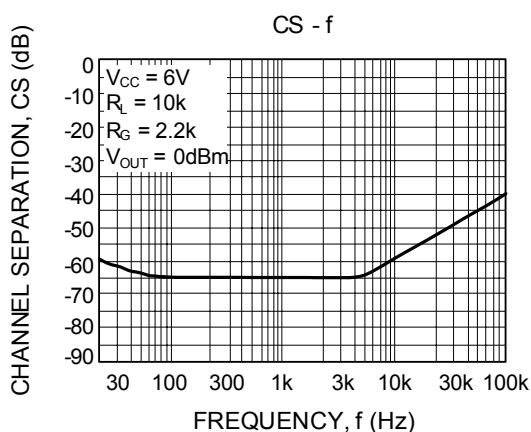
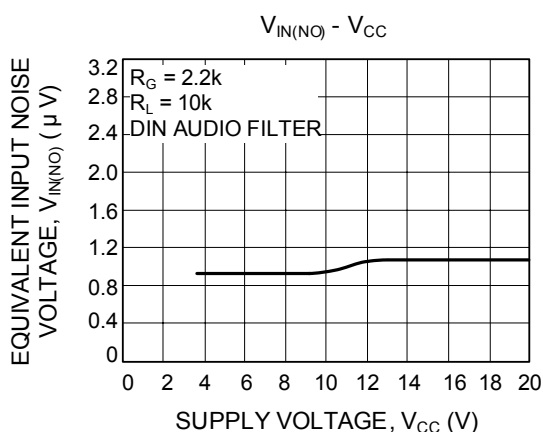
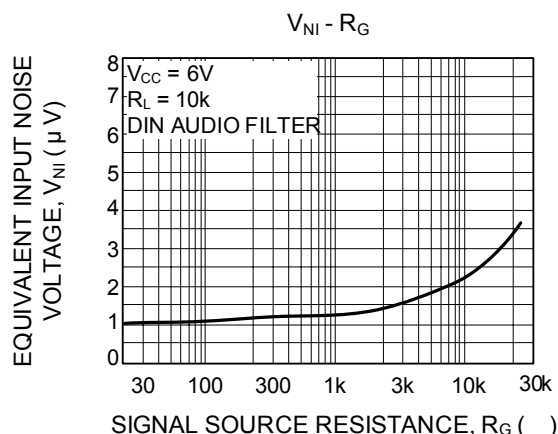
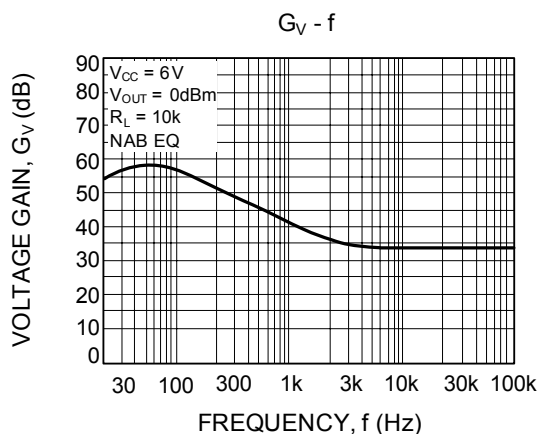
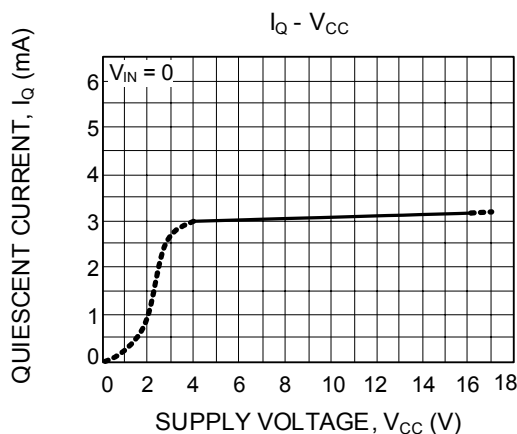
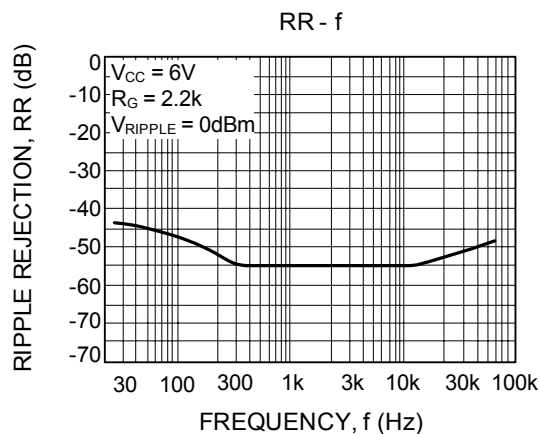
■ TYPICAL APPLICATION CIRCUIT



■ TYPICAL CHARACTERISTICS



■ TYPICAL CHARACTERISTICS



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