



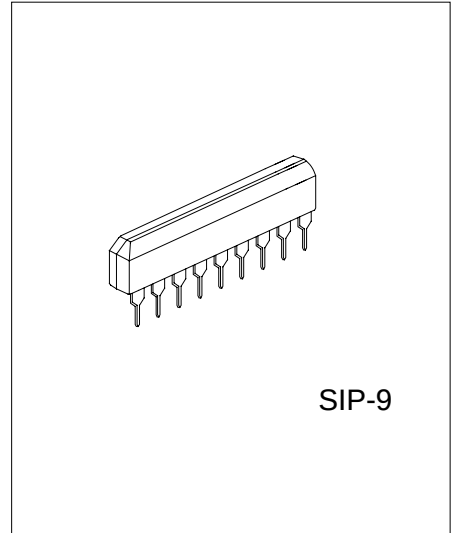
A6225

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°C)

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

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

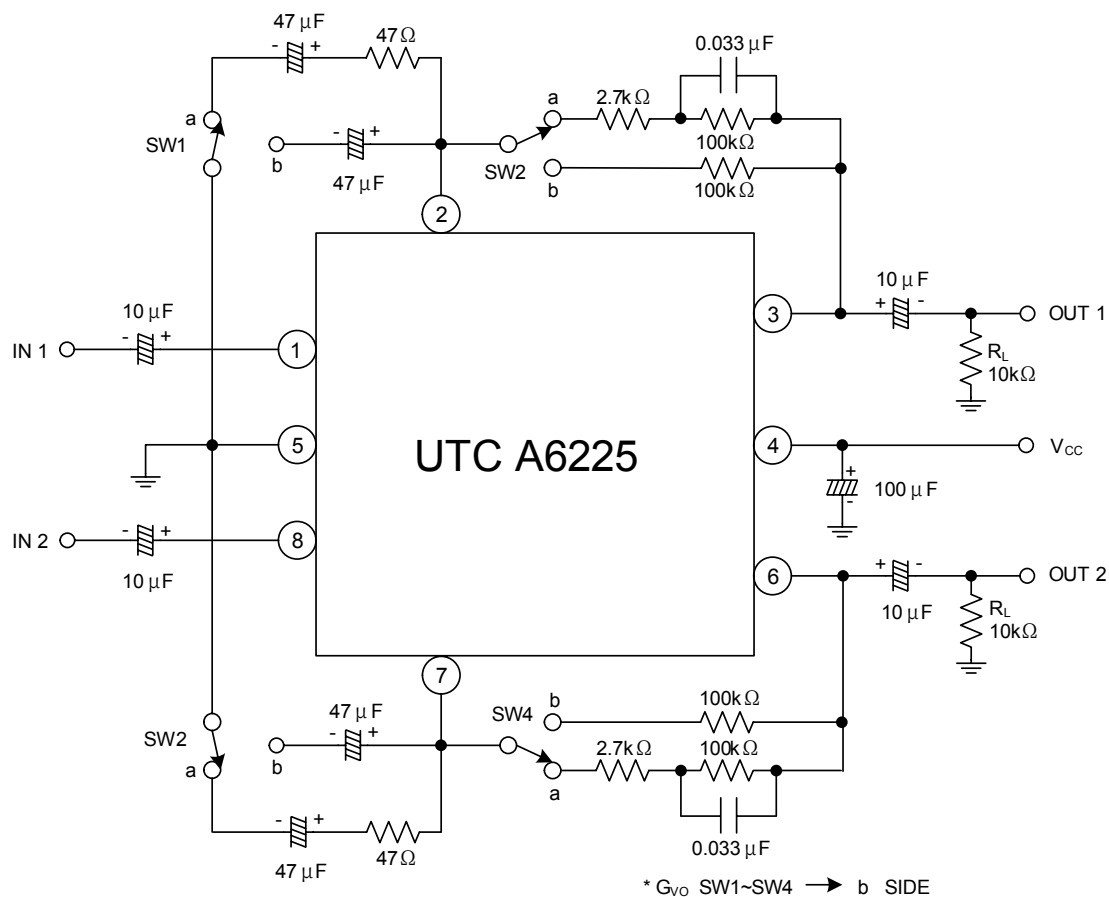
2. Absolute maximum ratings are stress ratings only and functional device operation is not implied. The device could be damaged beyond Absolute maximum ratings.
3. The device is guaranteed to meet performance specifications within 0°C~70°C operating temperature range and assured by design from -20°C~85°C.

■ ELECTRICAL CHARACTERISTICS

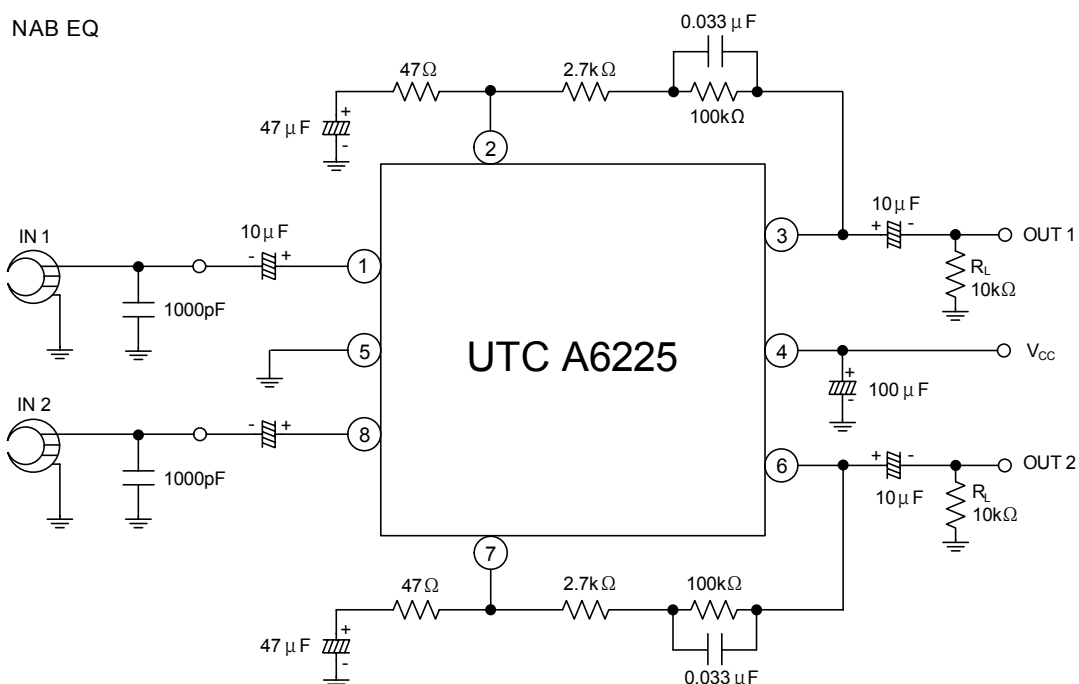
(Ta=25°C, V_{CC} 6V, R_G=600Ω, R_L=10kΩ, f=1kHz, unless otherwise specified.)

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(NO)}	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	%

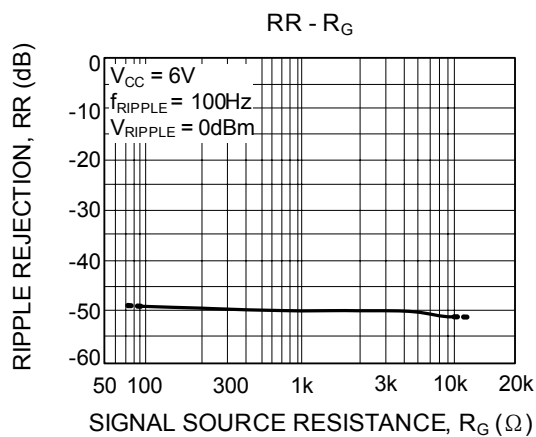
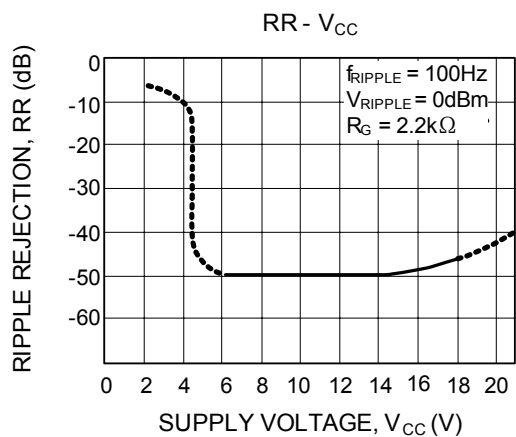
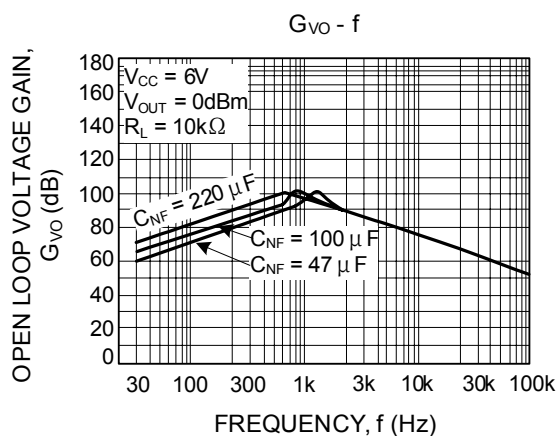
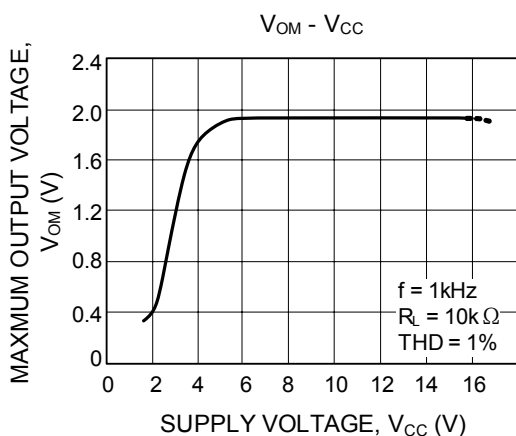
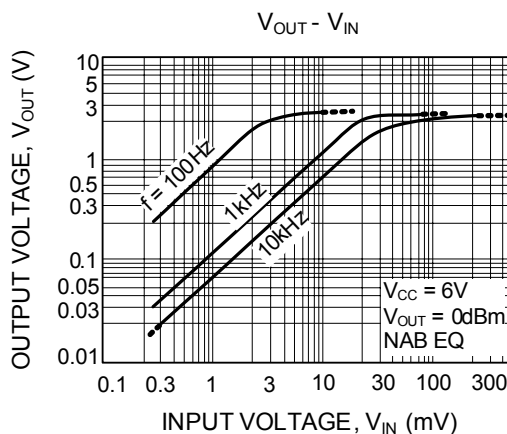
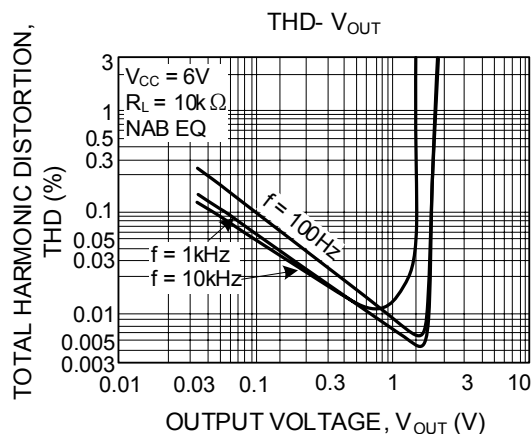
■ TEST CIRCUIT



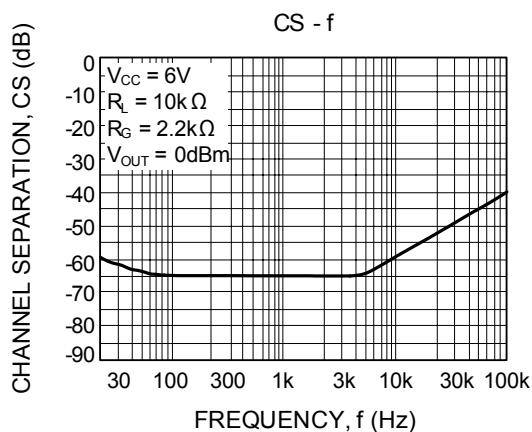
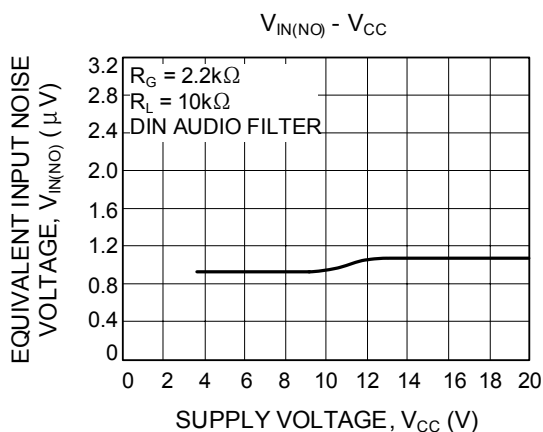
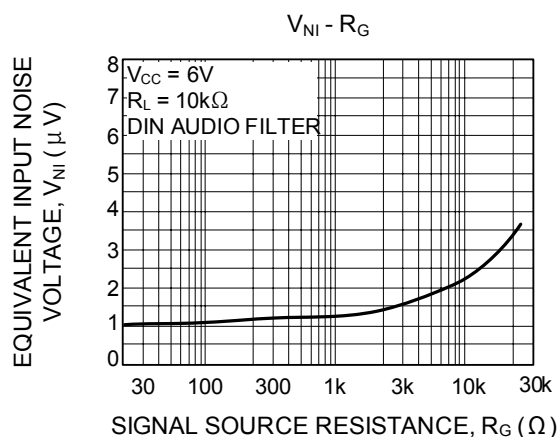
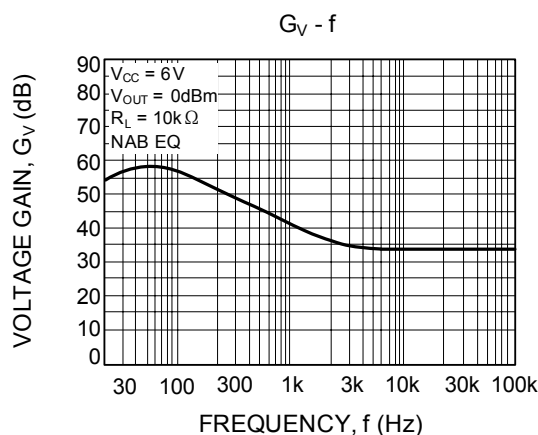
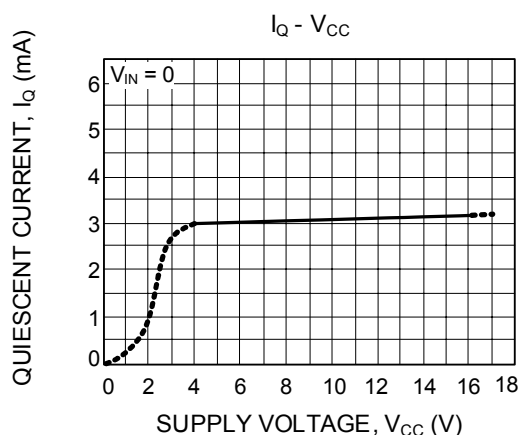
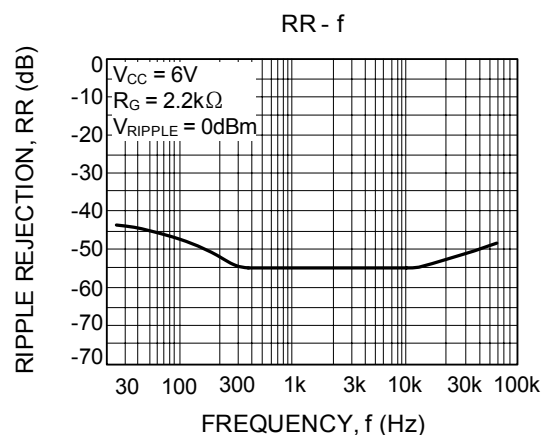
■ TYPICAL APPLICATION CIRCUIT



TYPICAL CHARACTERISTICS



TYPICAL CHARACTERISTICS



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