

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

Supply Voltage	V_{CC}	16	V
Package Dissipation ($T_a = 75^\circ\text{C}$)	P_D	430	mW
Lamp Driver Current (Pin 9)	I_L	75	mA
Operating Temperature	T_{opt}	-30 to +75	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 to +125	$^\circ\text{C}$

RECOMMENDED OPERATING CONDITIONS ($T_a = 25^\circ\text{C}$)

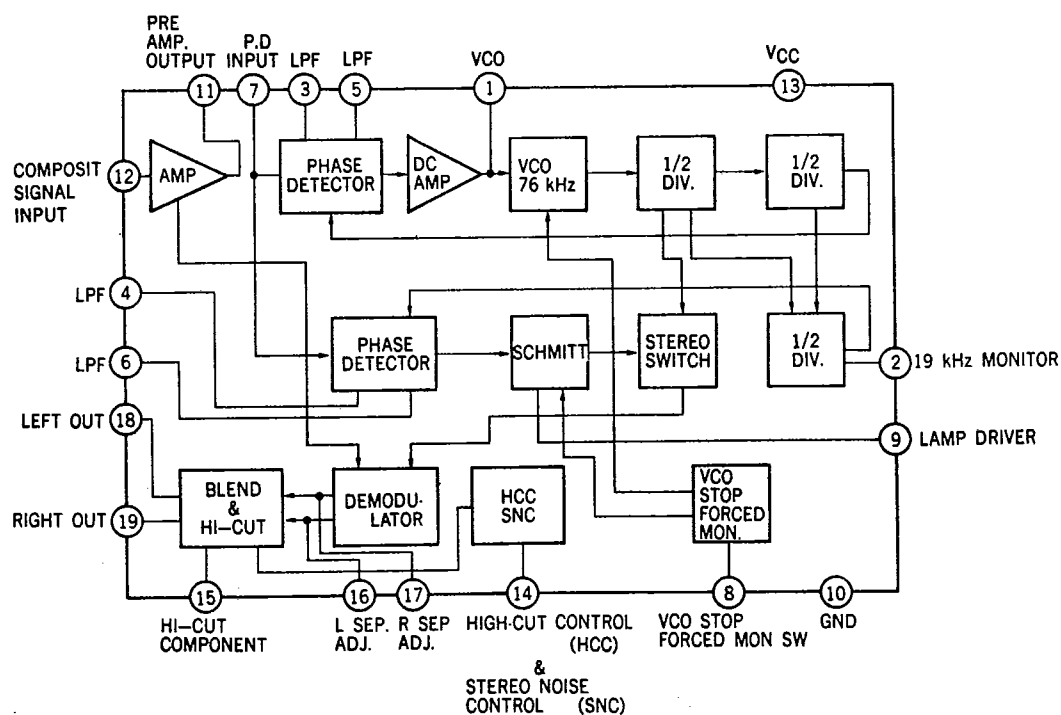
Operating Supply Voltage	V_{CC}	8	V
Supply Voltage Range	V_{CC}	6 to 14	V
Operating Ambient Temperature	T_a	-30 to +75	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

[$T_a = 25^\circ\text{C}$, $V_{CC} = 8\text{ V}$, $v_{in} = 300\text{ mV}$ ($\frac{\text{Pilot}}{\text{Composite}} = \frac{1}{10}$), $f = 1\text{ kHz}$, $R_L = 3.9\text{ k}\Omega$]

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Circuit Current	I_{CC}	12	20	28	mA	Quiescent
Input Impedance	Z_i		50		$\text{k}\Omega$	
Stereo Channel Separation	Sep.	35	45		dB	$f = 100\text{ Hz}$, $v_{in}(\text{Pilot}) = 30\text{ mV}$
		40	55		dB	$f = 1\text{ kHz}$, $v_{in}(\text{Pilot}) = 30\text{ mV}$
		35	45		dB	$f = 10\text{ kHz}$, $v_{in}(\text{Pilot}) = 30\text{ mV}$
Voltage Gain	A_v	-3.5	-0.6	+2.5	dB	Monaural input, $v_{in}(L+R) = 300\text{ mV}$
Channel Balance	Ch.B.	-2	0	+2	dB	Monaural Input, $v_{in}(L+R) = 300\text{ mV}$
	Ch.B.	-2	0	+2	dB	Stereo Input, $v_{in}(\text{Pilot}) = 30\text{ mV}$
Total Harmonic Distortion	T.H.D.		0.05	0.3	%	Monaural Input, $v_{in}(L+R) = 300\text{ mV}$
			0.05	0.3	%	Stereo Input, $v_{in}(\text{Pilot}) = 30\text{ mV}$
Lamp Indicator Input Level	LAMP ON	4	8	12	mV	Pilot Level
Lamp Hysteresis			4		dB	Pilot Level
Capture Range	C.R.	± 2	± 4		%	$v_{in}(\text{Pilot}) = 30\text{ mV}$
Ultrasonic Frequency Rejection	19 kHz Rej.		35		dB	19 kHz, $v_{in}(\text{Pilot}) = 30\text{ mV}$
	38 kHz Rej.		45		dB	38 kHz, $v_{in}(\text{Pilot}) = 30\text{ mV}$
SCA Rejection	SCA Rej.		70		dB	$\frac{\text{Pilot}}{\text{Composite}} = \frac{1}{10}$, $\frac{\text{SCA}}{\text{Composite}} = \frac{1}{10}$
Maximum Input Level	v_i	0.6	1.0		Vr.m.s.	Monaural Input, T.H.D. = 1 %
Signal-to-Noise Ratio	S/N	70	80		dB	Monaural Input, $v_{in}(L+R) = 300\text{ mV}$
Forced Monaural Level	V_{mono}	0.8			V	#8 terminal
VCO Stop Level	V_{stop}	0.8			V	#8 terminal
Stereo Channel Separation	Sep. C1	0		3	dB	$V_{14} = 0.4\text{ V}$
	Sep. C2		17		dB	$V_{14} = 1.0\text{ V}$
	Sep. C3	40	55		dB	$V_{14} = 1.6\text{ V}$
Voltage Gain	A_{vH}	-23.5	-19	-15	dB	$V_{14} = 0.4\text{ V}$, $f = 10\text{ kHz}$

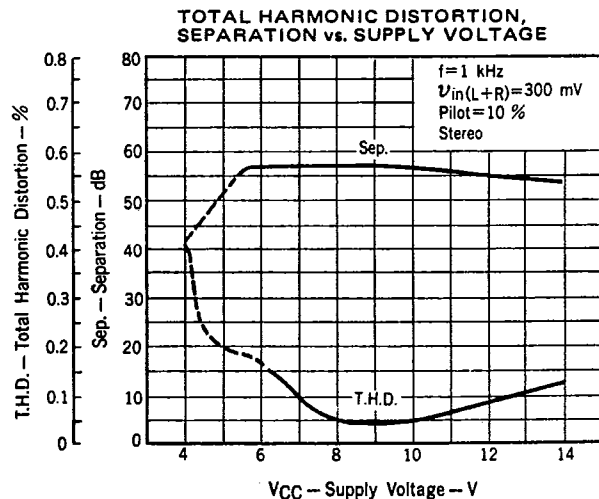
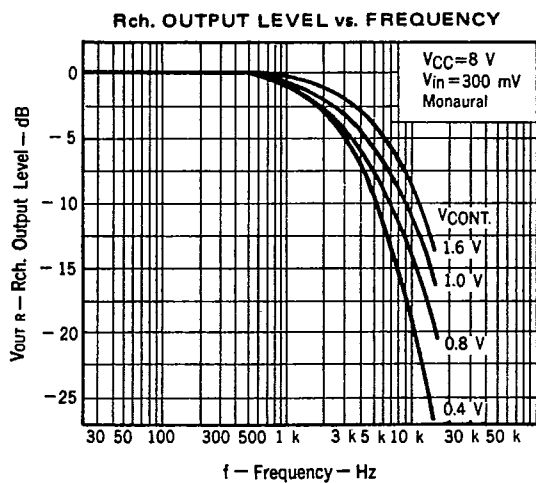
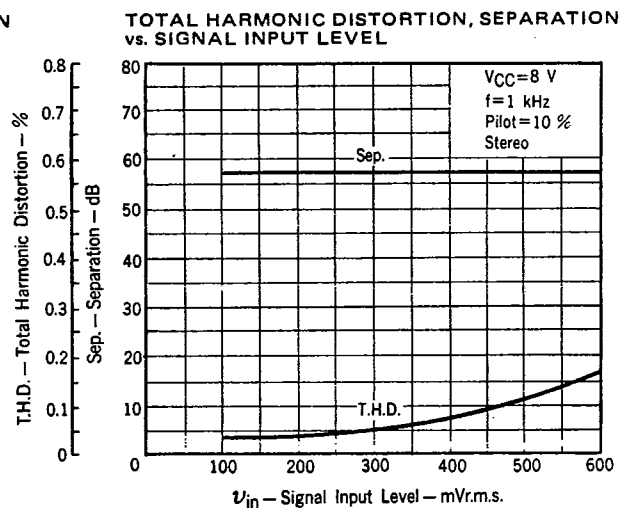
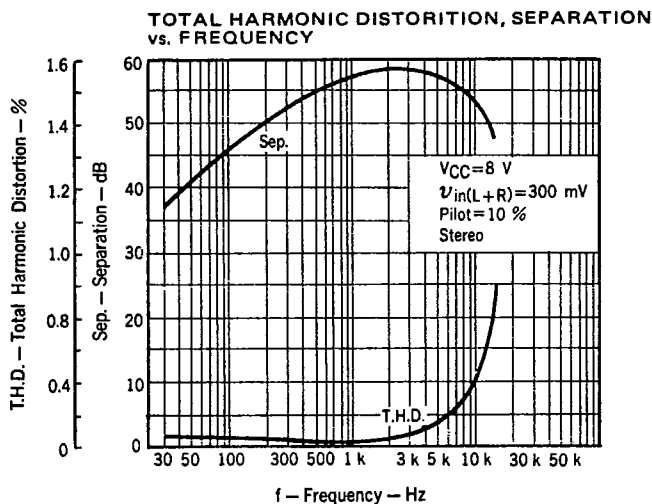
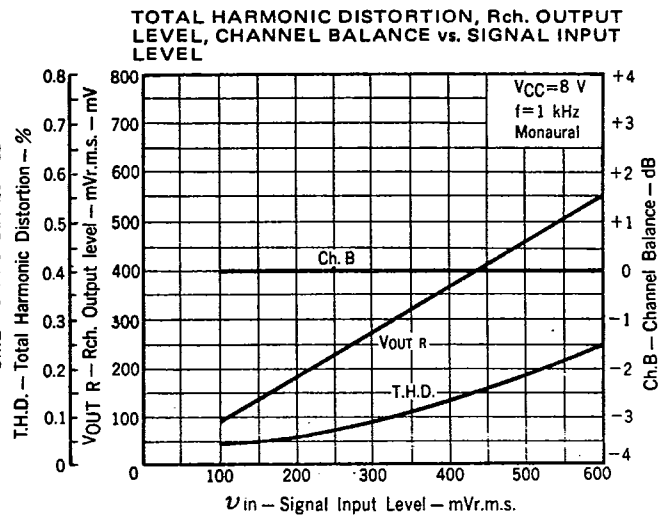
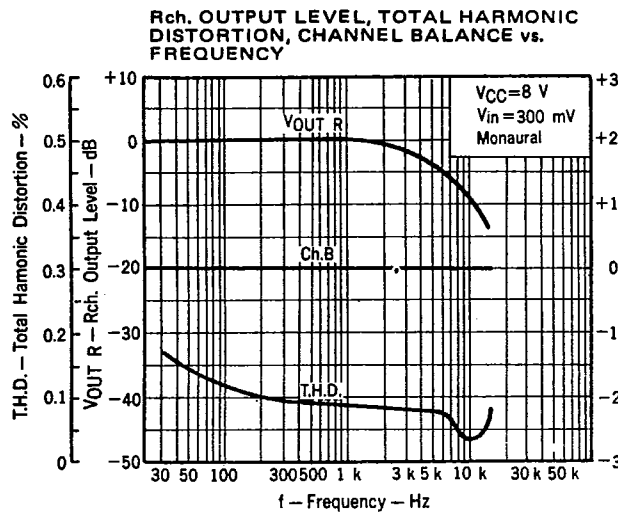
- * POLYSTYRENE CAPACITOR
- ** LOW PASS FILTER: BL - 13 (KORIN LAB.)
- *** Amp1 and, Amp2 should be set so that, the voltage gain between the output terminal of the IC and the output terminal of the LPF is 0 dB



μ PC1227V

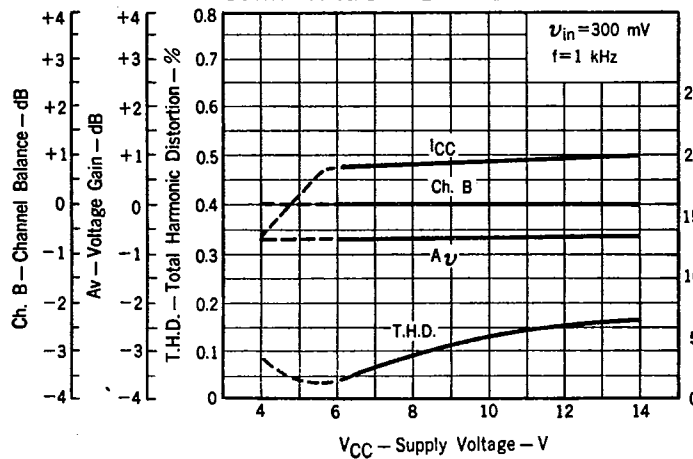
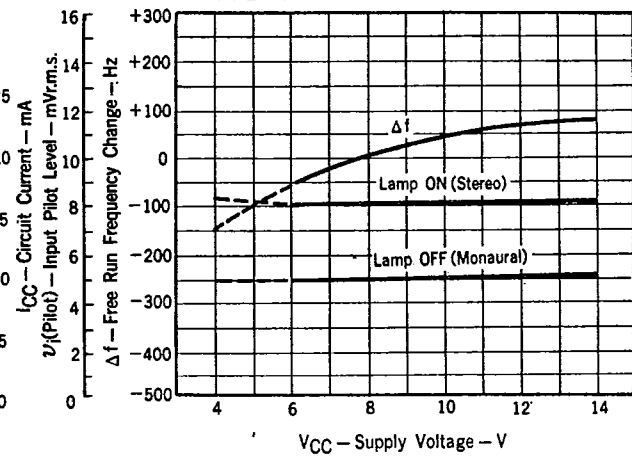
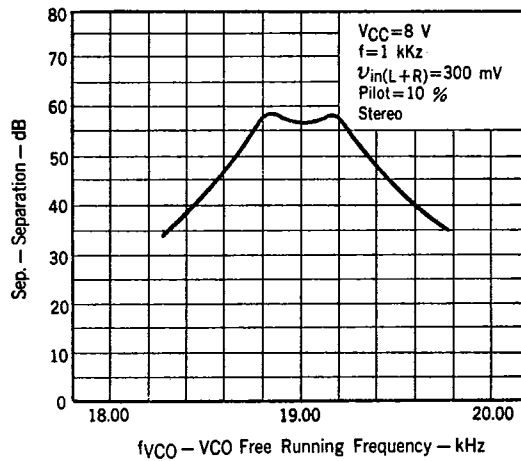
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72C 08519 D T-77-05-09

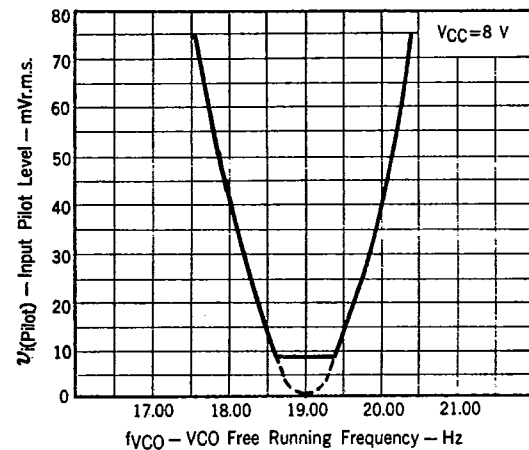
TYPICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

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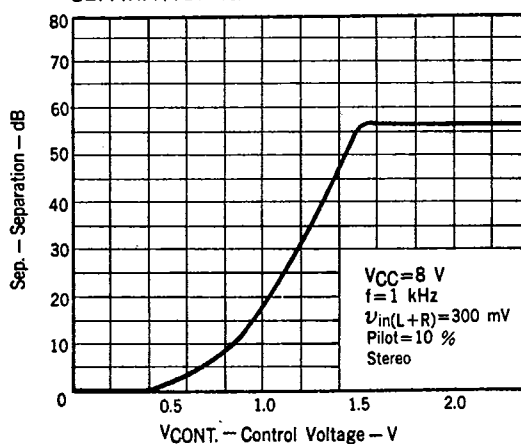
72C 08520 DT-77-05-09

CHANNEL BALANCE, VOLTAGE GAIN,
TOTAL HARMONIC DISTORTION, CIRCUIT
CURRENT vs. SUPPLY VOLTAGEINPUT PILOT LEVEL, FREE RUN
FREQUENCY CHANGE vs. SUPPLY
VOLTAGESEPARATION vs. VCO FREE
RUNNING FREQUENCY

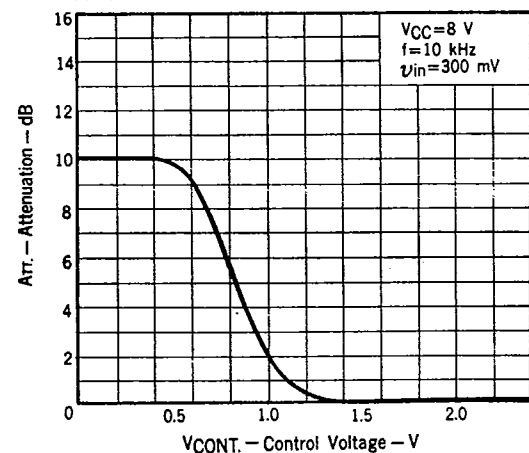
CAPTURE RANGE



SEPARATION vs. CONTROL VOLTAGE (SNC)



ATTENUATION vs. CONTROL VOLTAGE (HCC)



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COMPONENTS LAYOUT FOR P.C. ASSEMBLY (Copper side)

