SONY®

CXA1642P/M

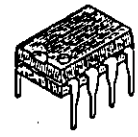
Vocal Canceller for "Karaoke" Equipment

For the availability of this product, please contact the sales office.

Description

The CXA1642P/M is a bipolar IC for use in "Karaoke" music entertainment systems that provides a built-in means of attenuating the vocal portions of recorded musical programs on CD, laser disks and other entertainment media.

CXA1642P
8 pin DIP (Plastic)



CXA1642M
8 pin SOP (Plastic)



Features

- Vocal cancel feature
- Low-level sound correction
- Internal MIX input amplifier
- Few external components

Absolute Maximum Ratings

• Supply voltage	Vcc	12	V
• Operating temperature	Topr	−20 to +75	°C
• Storage temperature	Tstg	−65 to +150	°C
• Allowable power dissipation			
	PD	500 mW (CXA1642P)	
		250 mW (CXA1642M)	

Recommended Operating Conditions

Supply voltage	1.8 to 10.0	V

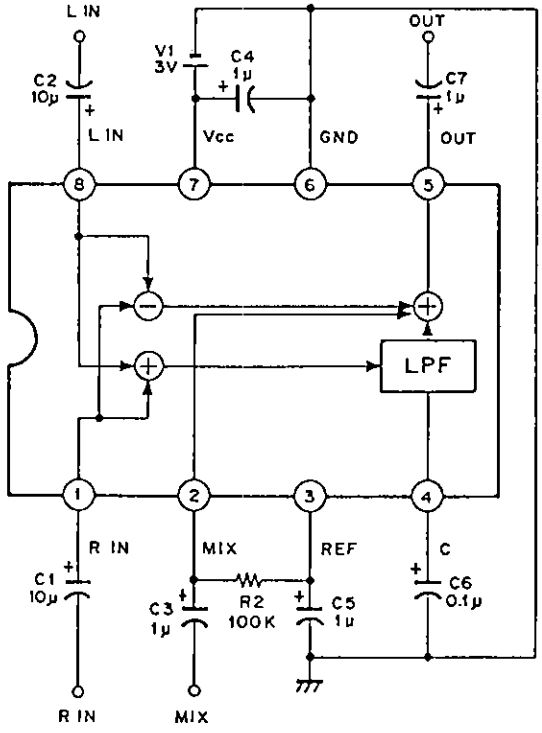
Applications

Use in all types of "Karaoke" audio systems to implement functions needed to allow singer's voice to override the originally recorded vocal track without disrupting the music tracks.

Structure

Bipolar silicon monolithic IC

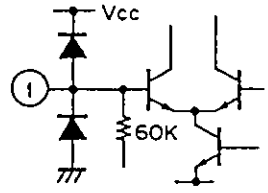
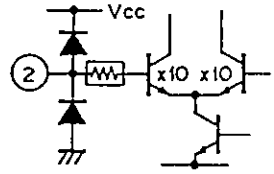
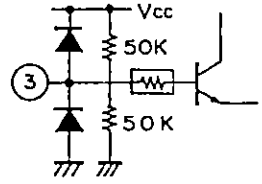
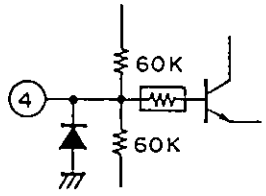
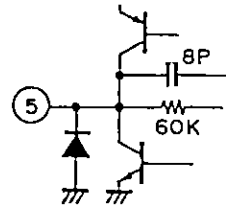
Block Diagram, Pin Configuration, and Application Circuit

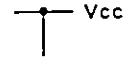
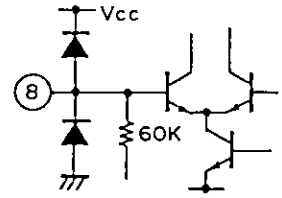


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E91809 – ST

Pin Description

Pin No.	Symbol	Equivalent circuit	Pin voltage	Description
1	R_IN		5.0	R-channel input
2	MIX		5.0	Mixing input
3	REF		5.0	Reference pin
4	C		5.0	LPF time constant pin
5	OUT		5.0	Output

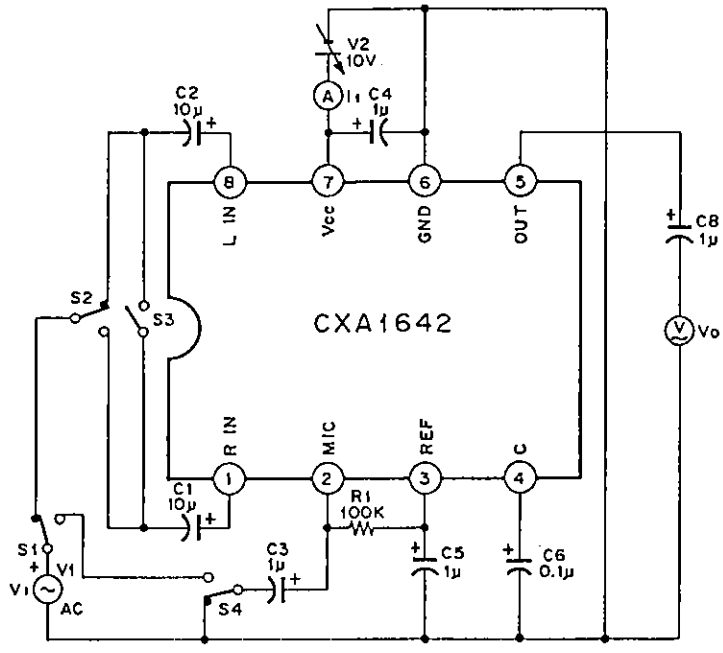
Pin No.	Symbol	Equivalent circuit	Pin voltage	Description
6	GND		0	GND
7	Vcc		10.0	Power supply
8	L_IN		5.0	L-channel input

Electrical Characteristics

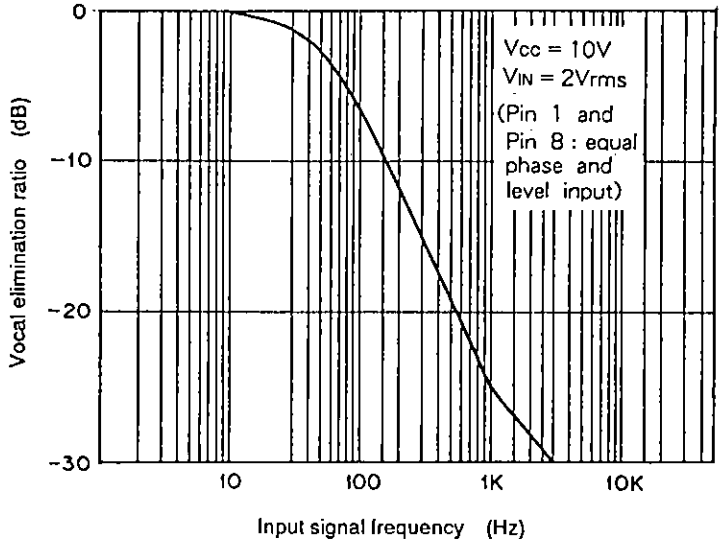
(Ta=25℃, Vcc=10)

Test No.	Test item	SW conditions				Test point	Output waveform and test method	Min.	Typ.	Max.	Unit
		S1	S2	S3	S4						
1	Circuit current	OFF	OFF	OFF	OFF	I_1	Circuit current with no signal	——	1.6	3.0	mA
2	Mixer gain	ON			ON	V_O	V_I=1kHz, 2Vrms	−1	0	1	dB
3	Noise level	OFF			OFF	V_O	Noise level with no signal	——	−86	−70	dBm
4	Vocal suppression			ON		V_O	V_I=1kHz, 2Vrms	20	24	——	dB
5	Low frequency gain	↓	↓	↓	↓	V_O	V_I=10Hz, 2Vrms	−1	0	1	dB

Electrical Characteristics Test Circuit

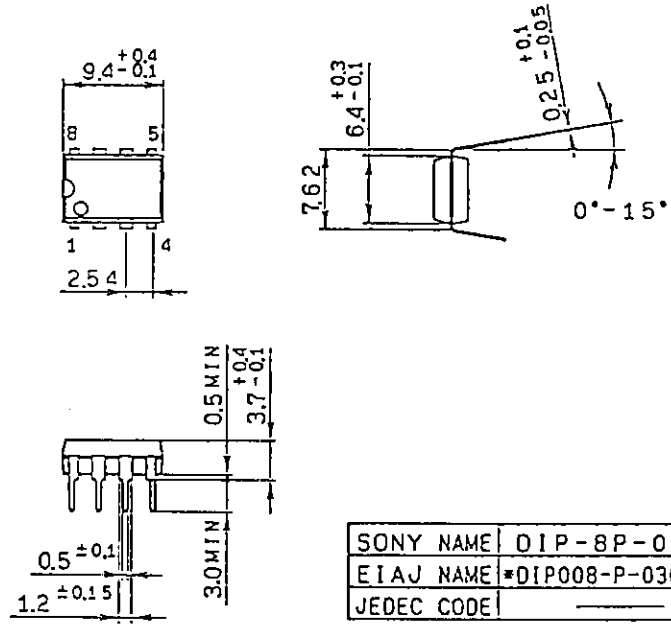


CXA1642 Vocal Elimination Ratio



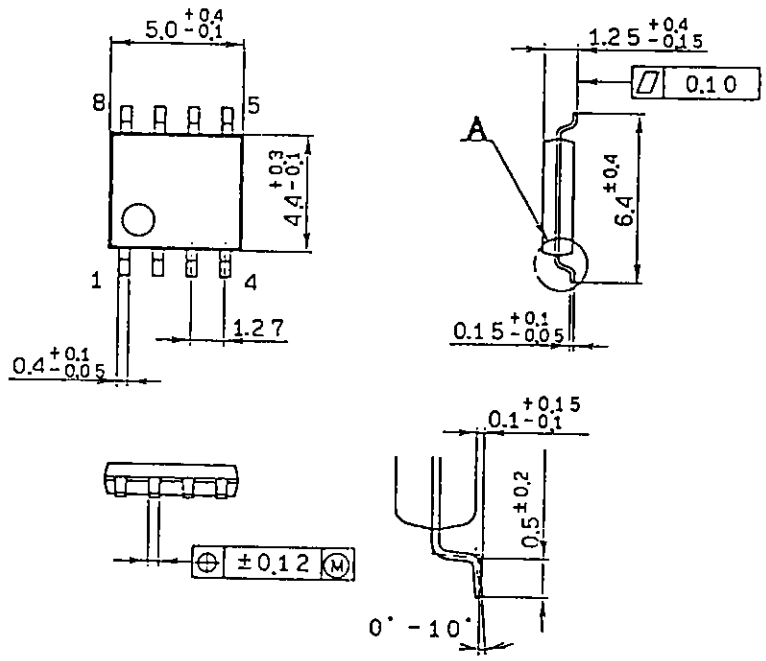
Package Outline Unit : mm

CXA1642P 8pin DIP (Plastic) 300mil 0.5g



SONY NAME	DIP-8P-01
EIAJ NAME	*DIP008-P-0300-A
JEDEC CODE	———

CXA1642M 8pin SOP (Plastic) 225mil



Detailed diagram of A

SONY NAME	SOP-8P-L03
EIAJ NAME	*SOP008-P-0225-A
JEDEC CODE	———