

BIPOLAR ANALOG INTEGRATED CIRCUIT

μ PC1176C

FM NOISE CANCELLER

SILICON BIPOLAR MONOLITHIC INTEGRATED CIRCUIT

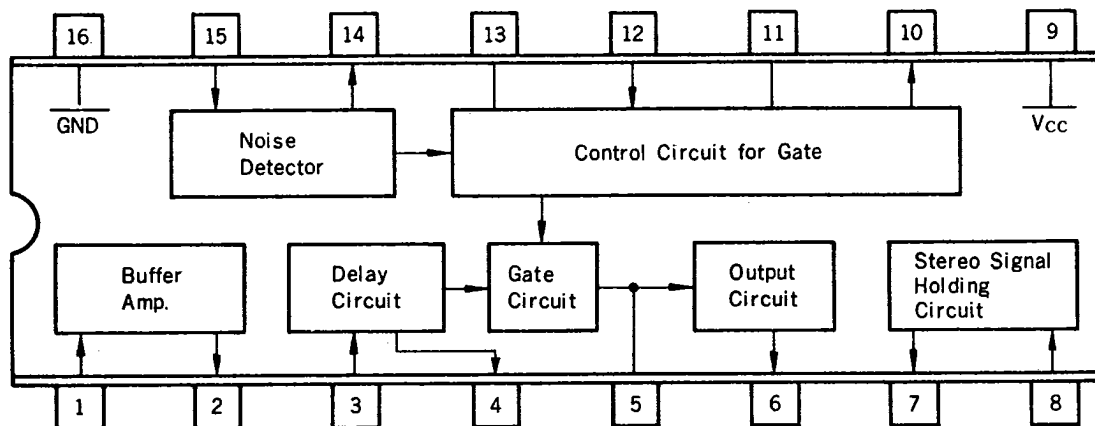
DESCRIPTION

μ PC1176C, a monolithic integrated circuit, is an FM Noise Canceller for use in automotive radio receivers. The incoming noise such as that from car ignition can be suppressed. Internally, buffer-amplifier, delay circuit, gate circuit, noise detector, control circuit for gate and stereo signal holding circuit are included.

FEATURES

- Effective pulsive noise suppression.
- Minimum distortion level due to the stereo signal holding circuit.
- Automatic change of the blanking time, according to noise intensity.
- Excellent response for highly repetitive noise.

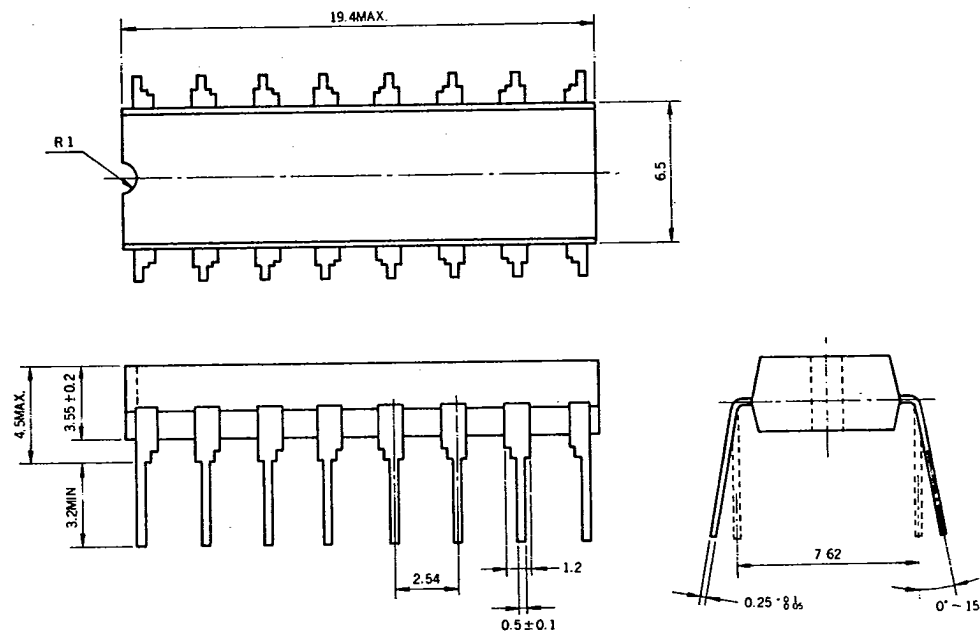
BLOCK DIAGRAM (Top View)



μPC1176C

6427525 N E C ELECTRONICS INC

72C 08491 D 7-77-05-07

PACKAGE DIMENSIONS (in millimeters)**ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)**

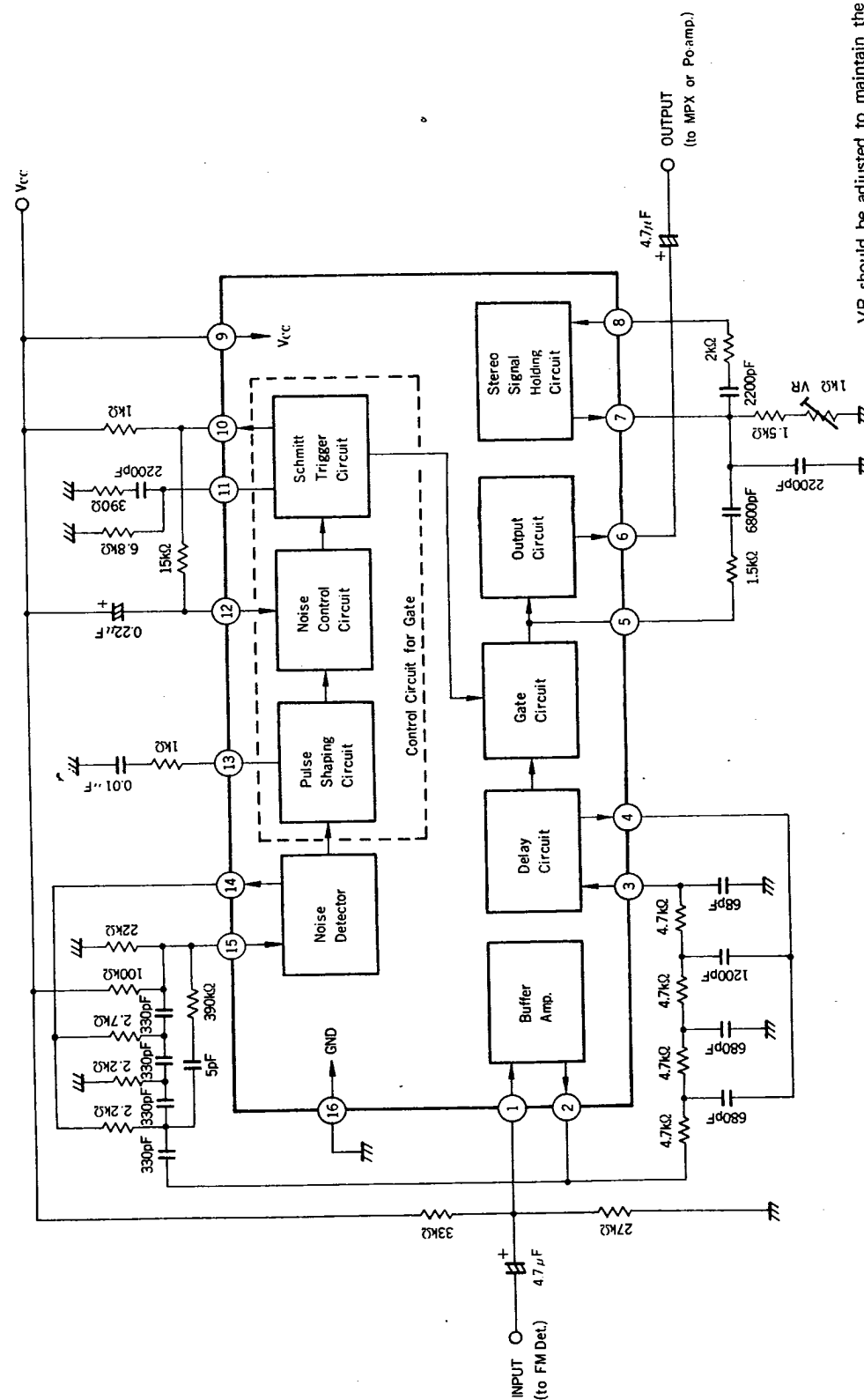
Supply Voltage	V _{CC}	15	V
Package Dissipation	PD	350*	mW
Operating Temperature	T _{opt}	-20 to +75	°C
Storage Temperature	T _{stg}	-40 to +125	°C

*Ta = 75°C

ELECTRICAL CHARACTERISTICS (Ta = 25°C, V_{CC} = 10V)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Circuit Current	I _{CC}	13	16.5	23	mA	V _i = 0
Voltage Gain	A _v	-0.3	0.7	1.7	dB	V _i = 500mVr.m.s., f = 1kHz
Blanking Time	T _B		30		μs	V _i = 500mVp, f = 1kHz, tw = 1μs
Triggering Voltage	V _T		40		mVp	f = 1kHz, tw = 10μs

TYPICAL APPLICATION CIRCUIT



VR should be adjusted to maintain the amplitude and frequency of the 38 kHz signal when the gate circuit is turned off.

μ PC1176C

6427525 N E C ELECTRONICS INC

72C 08493

D T-77-05-07

Diagram of Components Mounted on a Printed-Circuit Board (Bottom View)

