

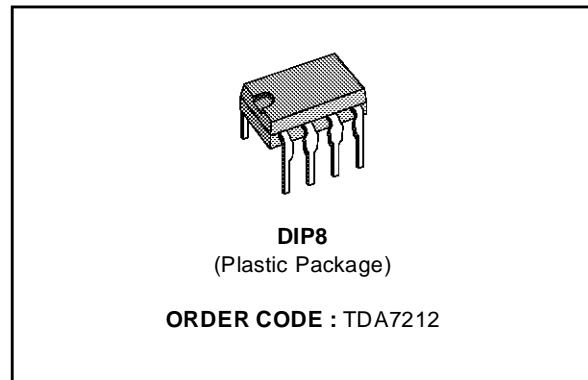
**LOW VOLTAGE FM XTAL CONTROLLED FRONT-END**

**ADVANCE DATA**

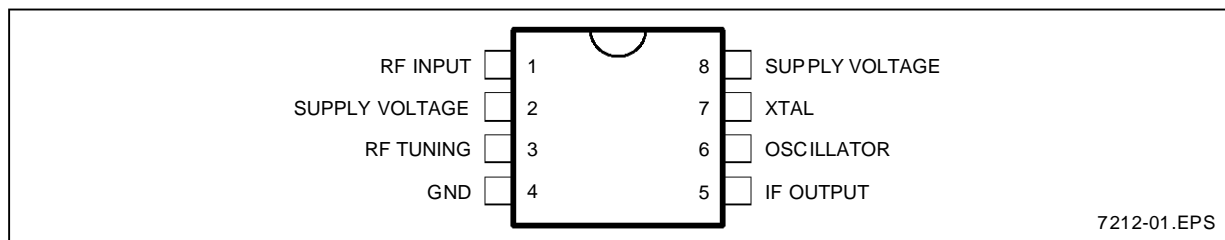
- RF PREAMPLIFIER
- BALANCED MIXER
- XTAL CONTROLLED OSCILLATOR (fundamental and overtone)
- LOW OSCILLATOR RADIATION
- HIGH SIGNAL HANDLING

**DESCRIPTION**

The TDA7212 is a monolithic integrated circuit in a 8 pin minidip package designed for general purpose XTAL controlled FM front-end up to 140MHz.

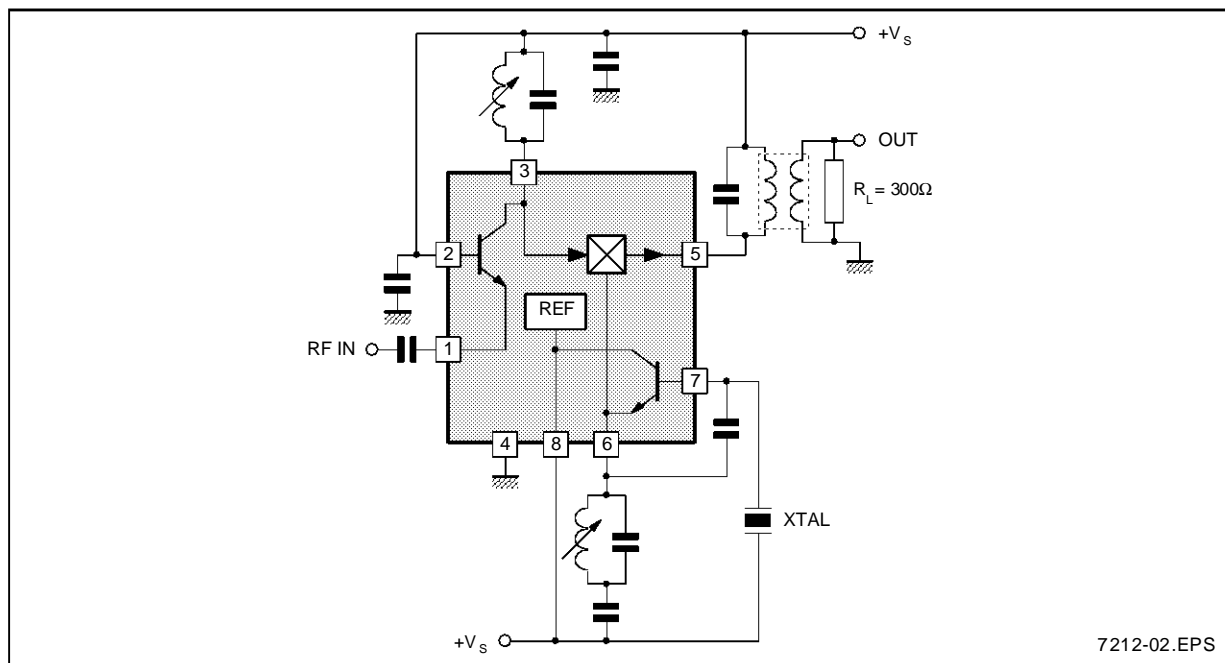


**PIN CONNECTIONS**



7212-01.EPS

**BLOCK DIAGRAM**



7212-02.EPS

# TDA7212

## ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
$V_S$	Supply Voltage	7	V
$P_{tot}$	Total Power Dissipation at $T_{amb} < 70^\circ\text{C}$	400	mW
$T_{oper}$	Operating Temperature	-20, +85	$^\circ\text{C}$
$T_{stg}, T_j$	Storage and Junction Temperature	-40, +150	$^\circ\text{C}$

7212-01.TBL

## THERMAL DATA

Symbol	Parameter	Value	Unit
$R_{th (-a)}$	Junction-ambient Thermal Resistance	Max. 200	$^\circ\text{C/W}$

7212-02.TBL

## ELECTRICAL CHARACTERISTICS

( $V_S = 3\text{V}$ ,  $T_{amb} = 25^\circ\text{C}$  unless otherwise specified - Refer to the Test Circuit)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
$V_S$	Supply Voltage			3	6	V
$I_S$	Supply Current			3		mA
$V_{osc}$	Local Oscillator Voltage (Pin 6)			200		mV <sub>RMS</sub>
G	Voltage Gain	$f = 49\text{MHz}$ , $R_{IN} = 75\Omega$ , $R_{OUT} = 300\Omega$		40		dB
$V_{off}$	Local Oscillator Stop Voltage			1.2		V

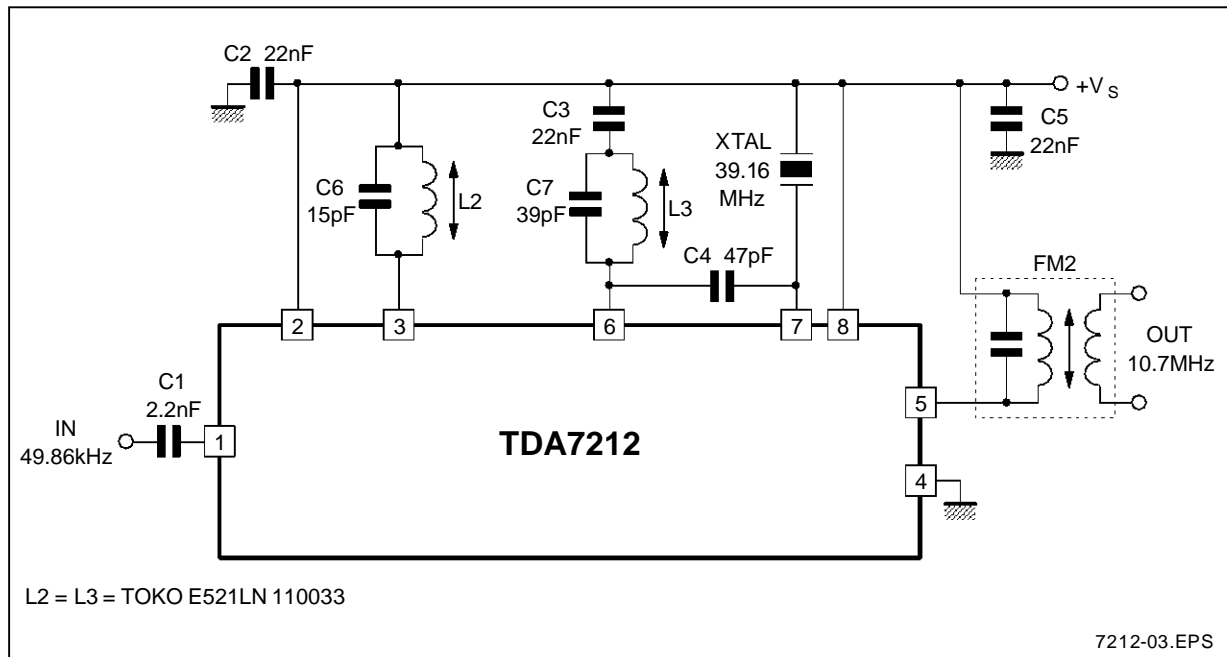
7212-03.TBL

## TYPICAL DC VOLTAGES (Refer to the Test Circuit)

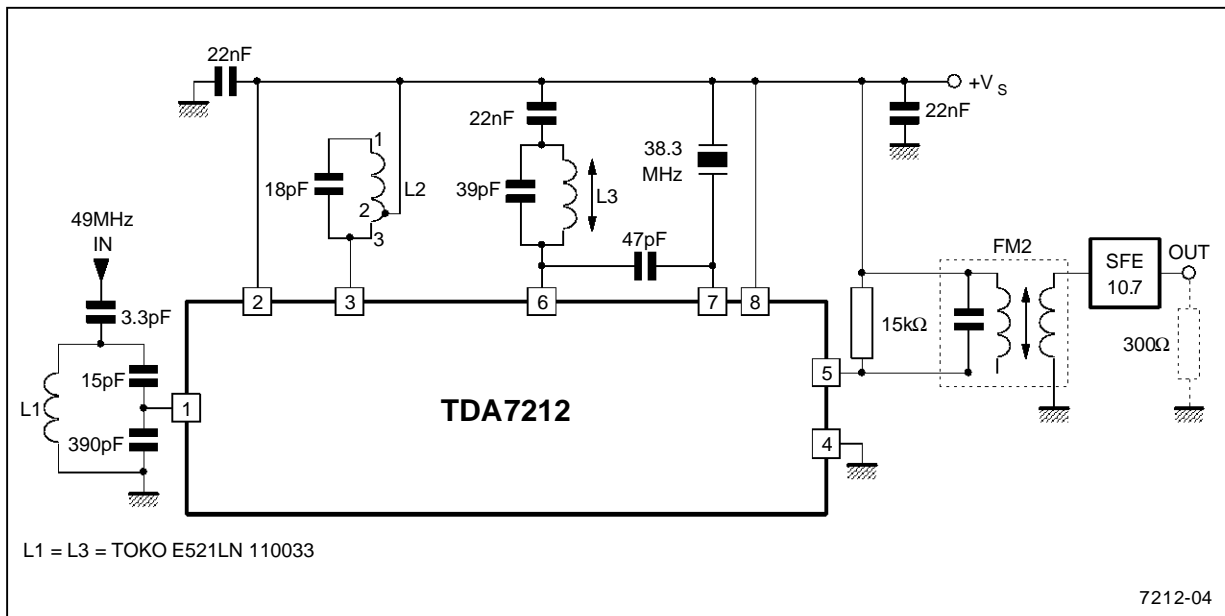
Pins	1	2	3	4	5	6	7	8
(V)	2.3	3	3	0	3	2.1	2.9	3

7212-04.TBL

## TEST CIRCUIT



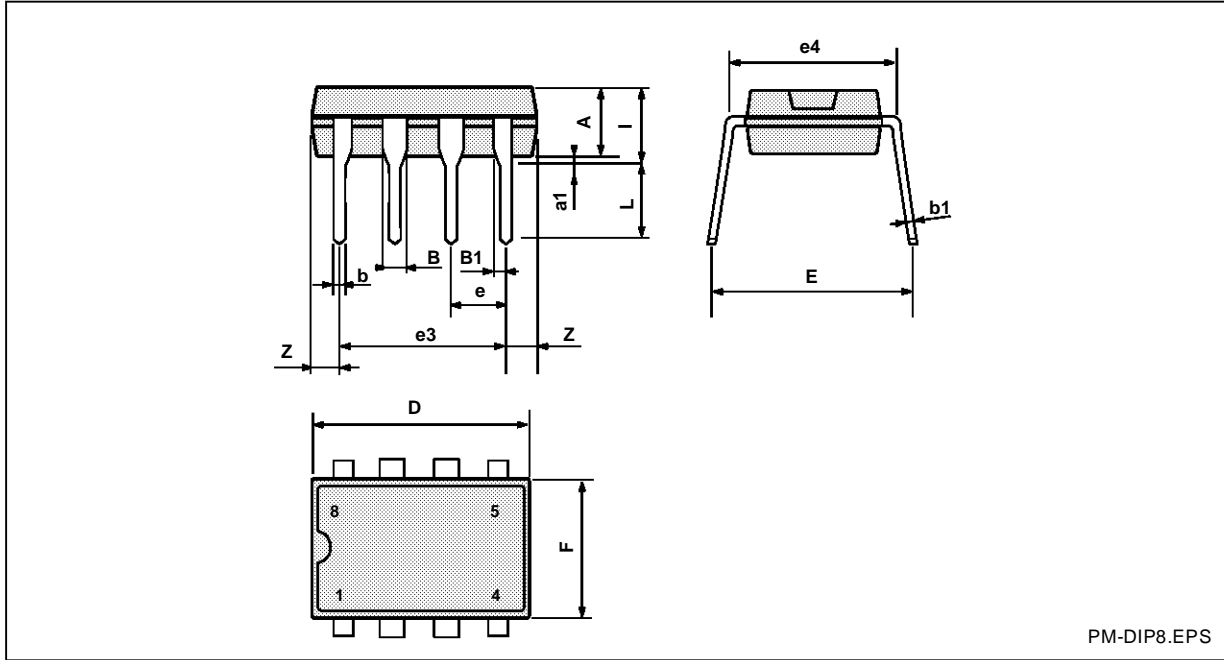
FRONT-END CORDLESS APPLICATION



**NB.** : In this application it is advisable to decrease the gain of the front-end through a tapping on the L2 coil (3 turns of 12). So it can be obtained: better selectivity, improved intermodulation performance, better matching with the following block that are IC's designed for double conversion radio receivers.

**PACKAGE MECHANICAL DATA**

8 PINS - PLASTIC DIP



Dimensions	Millimeters			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A		3.32			0.131	
a1	0.51			0.020		
B	1.15		1.65	0.045		0.065
b	0.356		0.55	0.014		0.022
b1	0.204		0.304	0.008		0.012
D			10.92			0.430
E	7.95		9.75	0.313		0.384
e		2.54			0.100	
e3		7.62			0.300	
e4		7.62			0.300	
F			6.6			0.260
i			5.08			0.200
L	3.18		3.81	0.125		0.150
Z			1.52			0.060

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