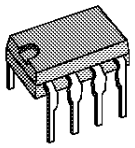
SGS-THOMSON MICROELECTRONICS

TDA7212

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



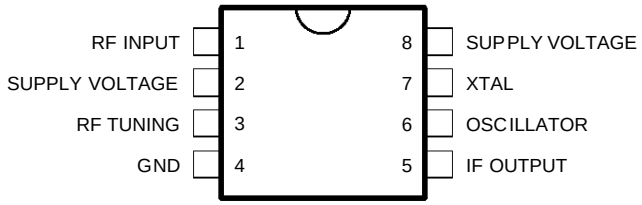
DIP8
(Plastic Package)

ORDER CODE : TDA7212

DESCRIPTION

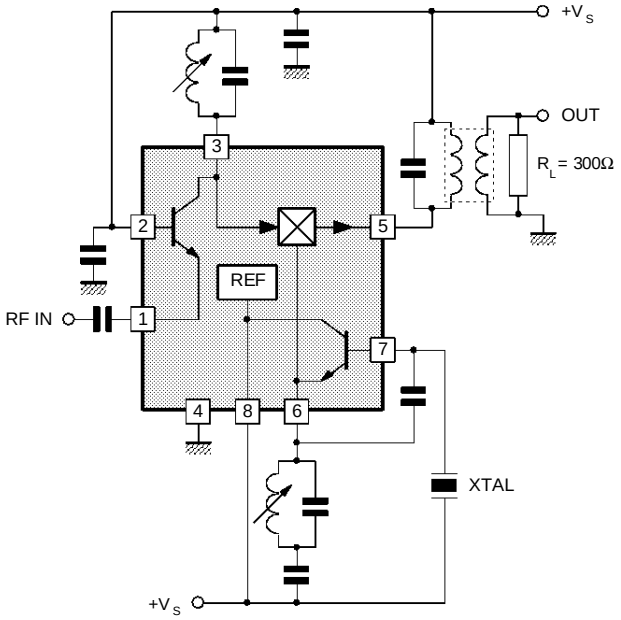
The TDA7212 is a monolithic integrated circuit in a 8 pin minidip package designed for general purpose XTAL controlled FM front-end up to 140MHz.

PIN CONNECTIONS



7212-01.EPS

BLOCK DIAGRAM



7212-02.EPS

ABSOLUTE MAXIMUM RATINGS

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

7212-01.TBL

THERMAL DATA

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

7212-02.TBL

ELECTRICAL CHARACTERISTICS

(V_S = 3V, T_{amb} = 25^{o}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_{RMS}
G	Voltage Gain	f = 49MHz, R_{IN} = 75Ω, R_{OUT} = 300Ω		40		dB
V_{off}	Local Oscillator Stop Voltage			1.2		V

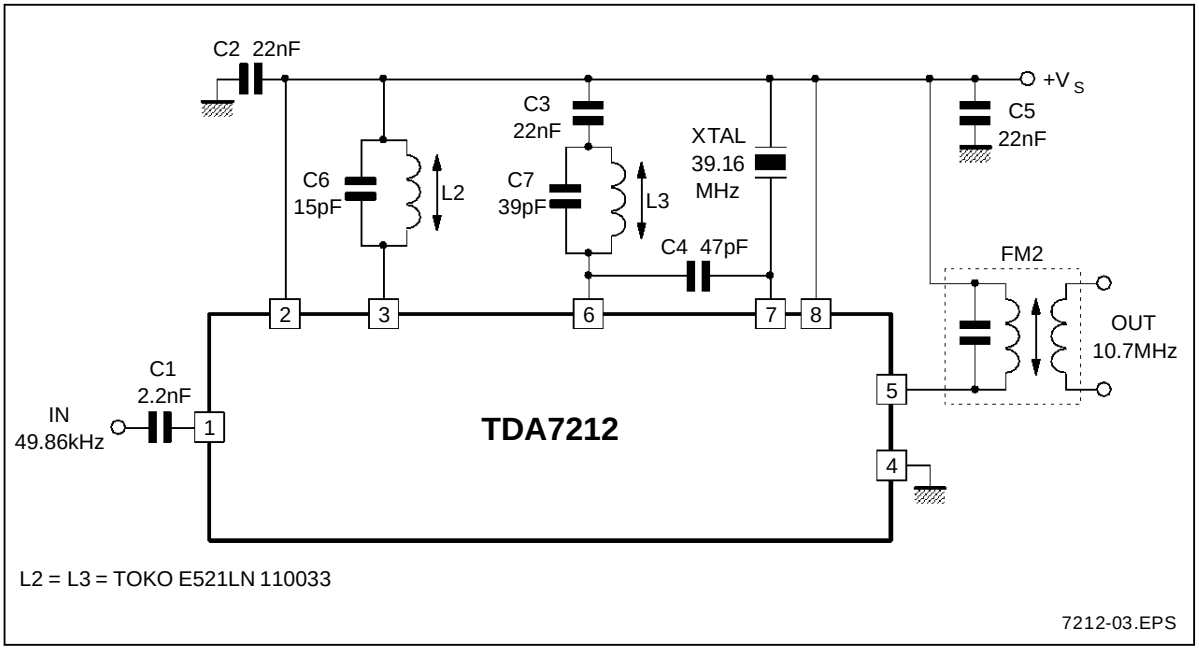
7212-03.TBL

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

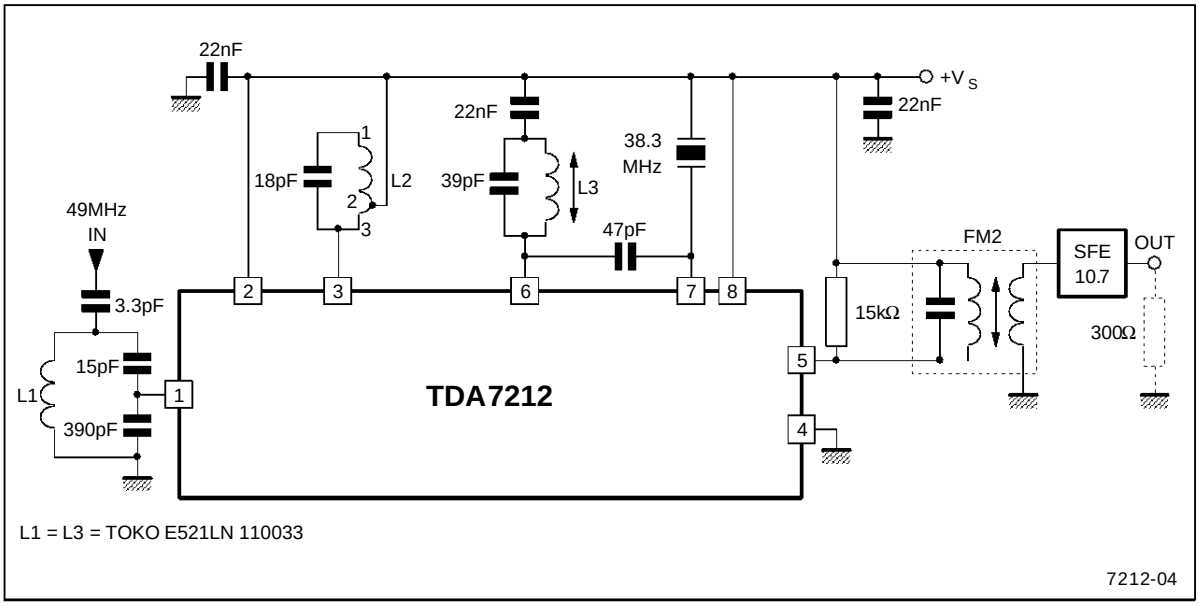
TEST CIRCUIT



L2 = L3 = TOKO E521LN 110033

7212-03.EPS

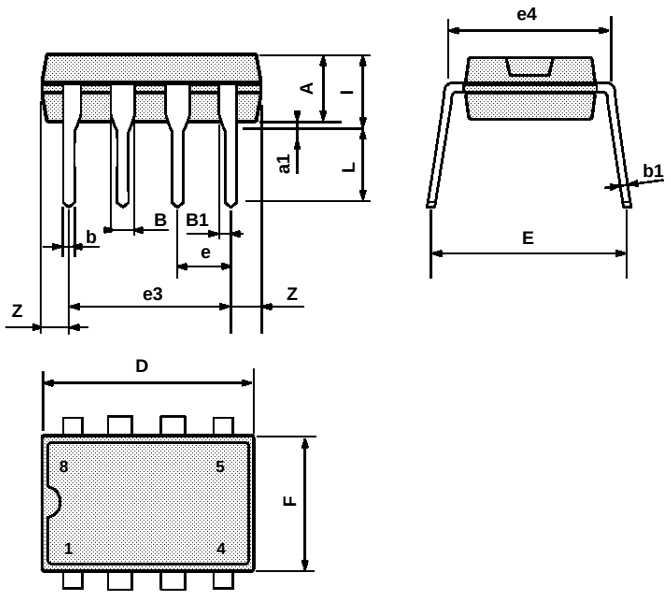
FRONT-END CORDLESS APPLICATION



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



PM-DIP8.EPS

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			0260
i			5.08			0.200
L	3.18		3.81	0.125		0.150
Z			1.52			0.060

DIP8.TBL

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