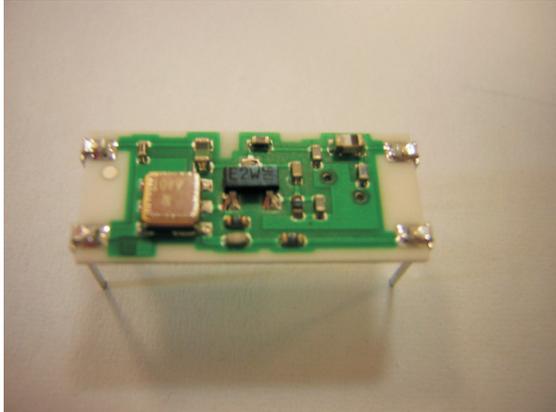


RT40-XXX

SAW Resonator Radio Transmitter Module



General description

The RT40-XXX is an hybrid circuit that allows to realize a complete radio transmitter adding a coding circuit.

Small size.

Low current consumption.

Optimized Power RF output at low voltage level.

Pinout compatible with RT4/RT14.

It shows stable electric characteristics thanks to the "Thick film hybrid" technology.

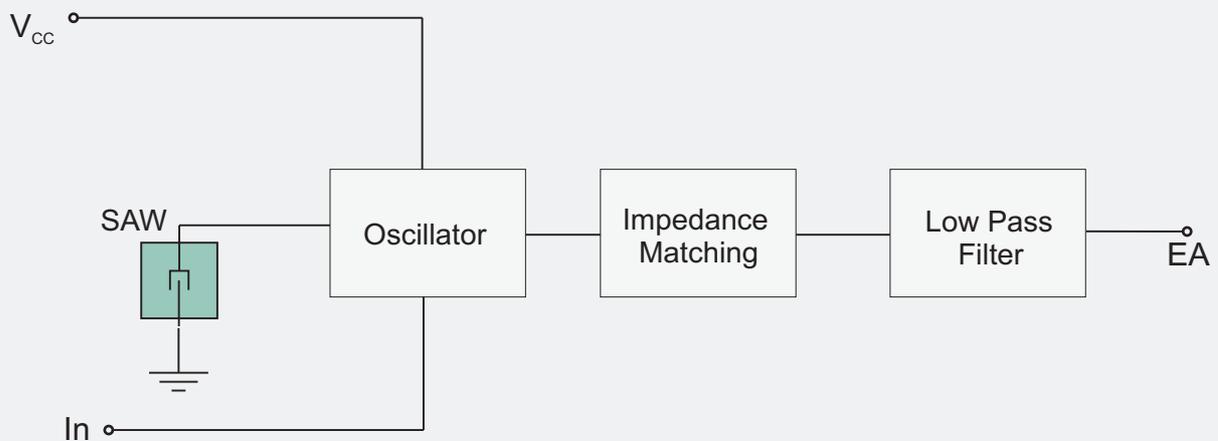
Features

- High Reliability
- DIL Package

Applications

- Wireless security systems
- Car Alarm systems
- Remote gate controls
- Sensor reporting

CIRCUIT SCHEMATIC



Electrical Characteristics

ABSOLUTE MAXIMUM RATINGS		MIN	MAX	UNIT
V_{CC}	Supply Voltage	2	14	V
V_{in}	Modulation Input	-0.3	5	V

$T_a = 25^\circ\text{C}$ unless otherwise specified

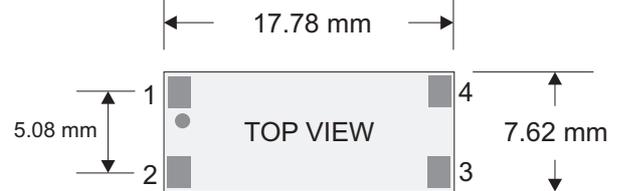
CHARACTERISTICS		MIN	TYP	MAX	UNIT
V_{CC}	Supply Voltage	2	5	12	VDC
I_s	Supply Current ($I_N=1\text{KHz}$ Square Wave $2V_{pp}$ to $3V_{pp}$)	1	3	4	mA
F_w	Working Frequency		433.92		Mhz
P_o	RF Output Power into 50Ω ($V_i=3V$, $V_{CC}=3V$)	1.5	3	4.5	dBm
P_o	RF Output Power into 50Ω ($V_{IN}=3V$, $V_{CC}=5V$)	3.5	5	6.5	dBm
P_o	RF Output Power into 50Ω ($V_{IN}=3V$, $V_{CC}=12V$)	4.5	6	7.5	dBm
P_o	RF Output Power into 50Ω ($V_{IN}=2V$, $V_{CC}=2V$)	-7	-3	0	dBm
Harmonic Spurious Emission below 1GHz			-39	-36	dBm
Harmonic Spurious Emission above 1GHz			-32	-30	dBm
Max Data Rate				9.6	Kbit/s
V_{in}	Modulation Input (duty-cycle max $\leq 10\%$ CEPT 70-03)	2		3	V
T_{OP}	Operating Temperature Range	-25		+80	$^\circ\text{C}$

Typically, equipment utilizing this device requires emissions testing and government approval, which is the responsibility of the equipment manufacturer.

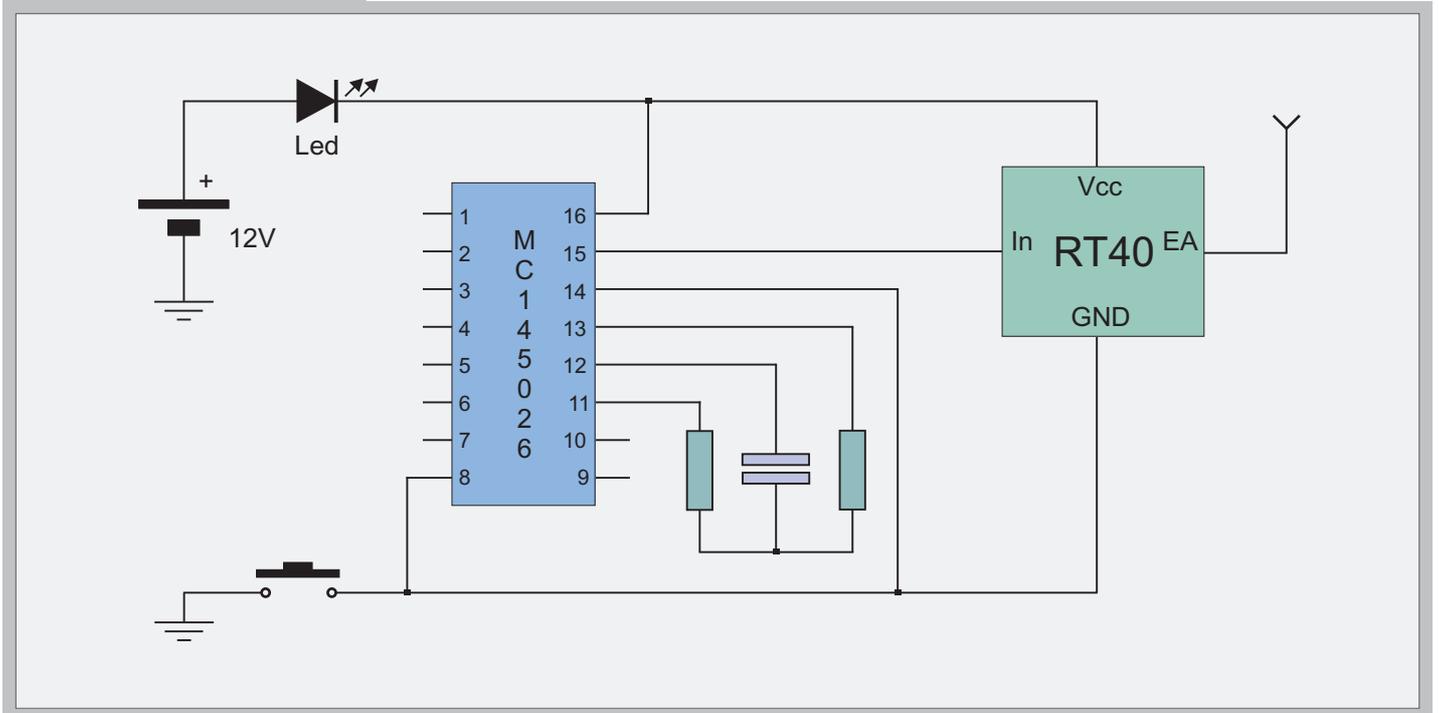
Pin Description

1	V_{CC}	Supply Voltage
2	GND	Ground
3	IN	Modulation Input
4	EA	External Antenna

Mechanical Dimensions



TYPICAL APPLICATION



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