

# **AM Hybrid Transmitter**

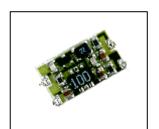
# **AM-RTn-XXX**

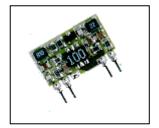
### **FEATURES**

- COMPLETE RF TRANSMITTER
- TRANSMIT RANGE UP TO 70m
- CMOS/TTL INPUT
- AVAILABLE IN DIL OR SIL PACKAGE
- NO ADJUSTABLE COMPONENTS
- VERY STABLE OPERATING FREQUENCY
- LOW CURRENT CONSUMPTION (TYP 4mA)
- LOW SPURIOUS EMISSIONS (-35dBc)
- WIDE OPERATING VOLTAGE (2-14V)
- AVAILABLE AS 315, 418 OR 433 MHz
- COMPATIBLE WITH RF SOLUTIONS RECEIVERS

### **APPLICATIONS**

- WIRELESS SECURITY SYSTEMS
- CAR ALARMS
- REMOTE GATE CONTROLS
- REMOTE SENSING
- DATA CAPTURE
- SENSOR REPORTING





#### **DESCRIPTION**

The R F Solutions Ltd. AM hybrid transmitter module provides a complete RF transmitter which can be used to transmit data at up to 4 kHz from any standard CMOS/TTL source.

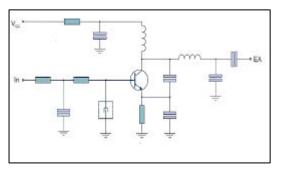
The module is very simple to operate and offers low current consumption (typ. 4 mA). Data can be supplied directly from a microprocessor or encoding device, thus keeping the component count down and ensuring a low hardware cost.

The module exhibits extremely stable electronic characteristics due to the use of 'Thick-Film' hybrid technology, which uses no adjustable components and ensures very reliable operation.

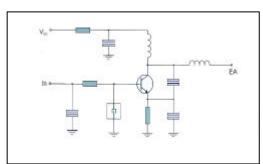
The modules are compatible with R F solutions Ltd. range of AM receivers to provide a complete solution.

# **CIRCUIT SCHEMATICS**

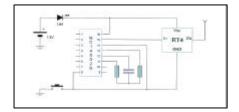
## RT4



## RT5



# **TYPICAL APPLICATION**



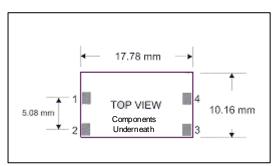


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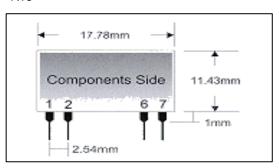
# **AM-RTn-XXX**

# **MECHANICAL DIMENSIONS**

RT4



### RT5



#### **PIN DESCRIPTIONS**

RT4 Pin	RT5 Pin	Name	Description
1	7	Vcc	Supply Voltage
2	6	GND	Ground, Connect to RF earth return path
3	2	IN	Data input
4	1	EA	External Antenna

#### **ELECTRICAL CHARACTERISTICS**

Ambi ent temp = 25°C unless otherwise stated

Characteristic	Min.	Тур.	Max.	Dimensions
Supply Voltage	2		14	Vdc
Supply Current (Vcc=5V IN=1kHz)		4		mA
Supply Current (Vcc=5V IN=DC)		50		nA
Working Frequency	303.8		433.92	MHz
RF Output Power into 50Ω (Vcc=5V)		0		-dBm
Harmonic Spurious Emissions		-30		-dBc
Input Voltage High	2		Vcc	V
Time from Power on to data transmission		10		μSec
Data Rate	50		4000	Hz
Operating Temperature	-25		+80	°C

# **PART NUMBERING**

Part Number	Description		
AM-RT4-XXX	DIL AM Transmitter Module XXX MHz		
AM-RT5-XXX	SIL AM Transmitter Module XXX MHz		

**XXX** = 315, 418, 433MHz

Other Frequencies available on request

Should you require further assistance, please call;

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R F Solutions Ltd is a member of the Low Power radio Association

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