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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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AM Hybrid Transmitter

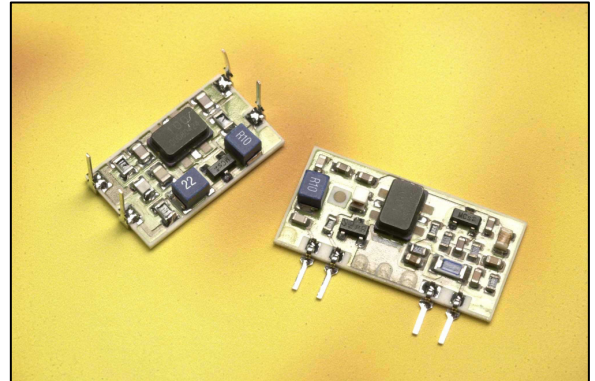
AM-RT4-XXX
AM-RT5-XXX
AM-RTQ4-XXX
AM-RT14-XXX

Features

- Complete RF Transmitter
- CMOS / TTL Input
- No Adjustable Components
- Very Stable Operating Frequency
- Low Current Consumption
- Low Spurious Emissions

Applications

- Wireless Security Systems
- Car Alarms
- Remote Gate Controls
- Remote Sensing
- Data Capture
- Sensor Reporting



RT4 / RT5

- Available as 315, 418, 433 MHz
- Range up to 70 metres
- SAW Design
- Available In DIL or SIL Package
- Wide Operating Voltage

RTQ4 / RT14

- High Output Power
- PLL Design
- Range 100+ metres
- Available as 433, 868 MHz

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 4KHz 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.

Ordering Information

Part Number	Description
AM-RT4-XXX	DIL AM Transmitter Module XXX MHz
AM-RTQ4-XXX	DIL AM Transmitter Module XXX MHz
AM-RT5-XXX	SIL AM Transmitter Module XXX MHz
AM-RT14-XXX	DIL AM Transmitter Module XXX MHz, SAW Resonator
AM-RT14-XXX-SO	SMT AM Transmitter Module XXX MHz, SAW Resonator

Frequency Availability

RT4 / RT5:	XXX = 315, 418, 433MHz	Other Frequencies available on request
RTQ4:	XXX = 868MHz	Other Frequencies available on request
RT14:	XXX = 433MHz	Other Frequencies available on request

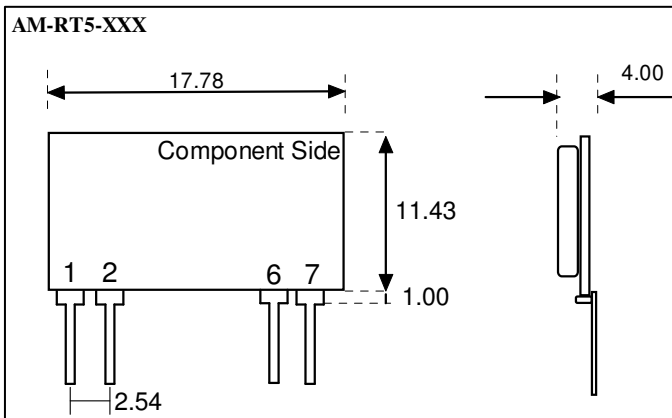
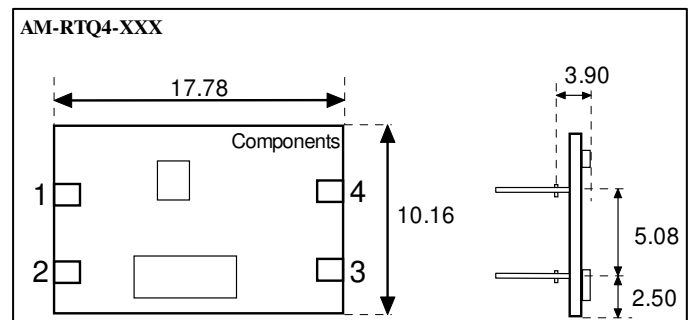
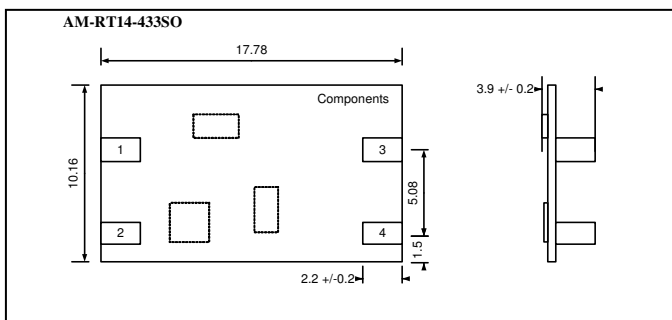
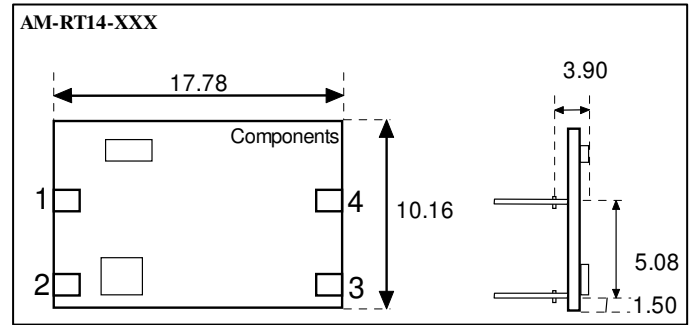
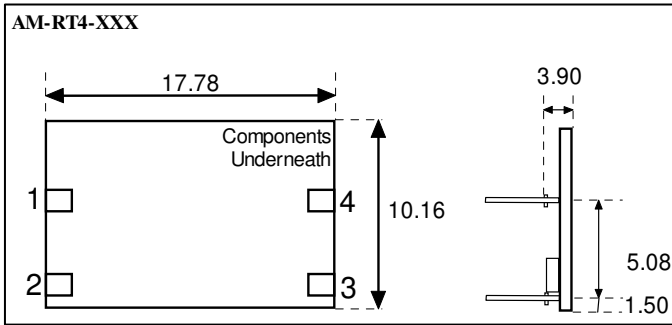




AM Hybrid Transmitter

AM-RT4-XXX
 AM-RT5-XXX
 AM-RTQ4-XXX
 AM-RT14-XXX

Mechanical Dimensions



Notes

Pins on 0.1" pitch
 Pin Dimensions: 0.25 x 0.50mm
 All measurements in mm
 Tolerance: +/- 0.2mm

The component side differs depending on module

Pin Descriptions

RT4 / RTQ4 / RT14	RT14-SO	RT5	Name	Description
1	1	7	Vcc	Supply Voltage
2	2	6	GND	Ground, Connect to RF earth return path
3	4	2	IN	Data input
4	3	1	ANT	External Antenna



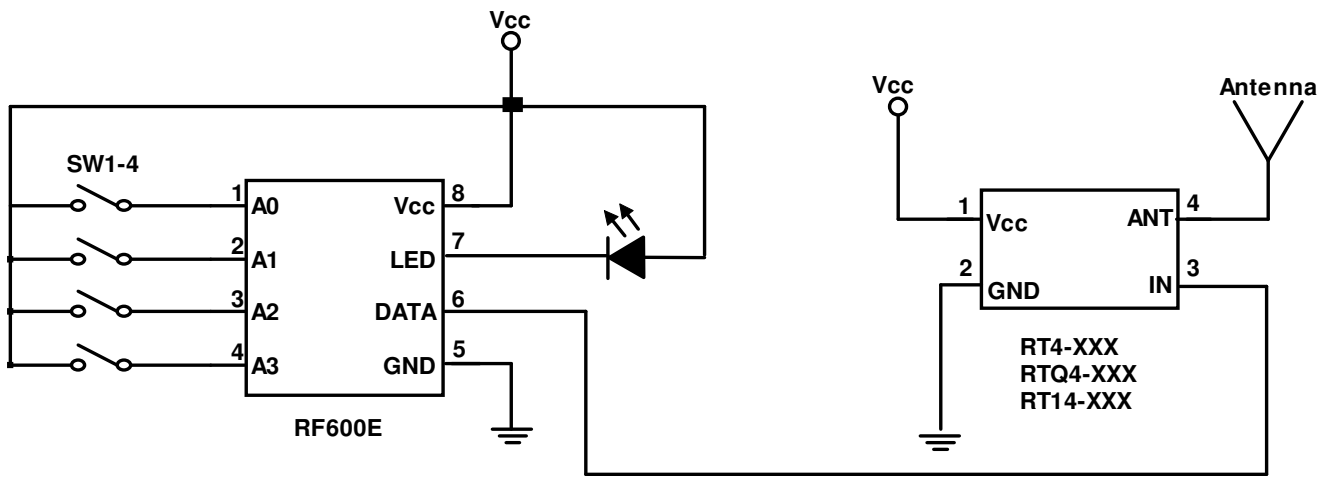
AM Hybrid Transmitter

AM-RT4-XXX
AM-RT5-XXX
AM-RTQ4-XXX
AM-RT14-XXX

Typical Application

For further information on this circuit please see datasheet DS600

Transmitter Circuit





AM Hybrid Transmitter

AM-RT4-XXX
AM-RT5-XXX
AM-RTQ4-XXX
AM-RT14-XXX

RT4/RT5: Electrical Characteristics

Ambient temp = 25 °C unless otherwise stated.

Characteristic	Min.	Typ.	Max.	Dimensions
Supply Voltage	2		14	Vdc
Supply Current (Vcc=5V IN=1kHz)		4		mA
Supply Current (Vcc=5V IN=DC GND)		50		nA
Working Frequency	303.8		433.92	MHz
Frequency Tolerance		+/-100		KHz
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		9,600	bps
Operating Temperature	-25		+80	°C

RTQ4: Electrical Characteristics

Ambient temp = 25 °C unless otherwise stated.

Characteristic	Min.	Typ.	Max.	Dimensions
Supply Voltage	1.9		5	Vdc
Supply Current (Vcc=5V IN=1kHz)		12		mA
Working Frequency		868.35		MHz
Frequency Tolerance	-35		+35	KHz
RF Output Power into 50Ω (Vcc=4V)	+5	+7		dBm
Harmonic Spurious Emissions		-50		dBc
Input Voltage High	0.7*Vcc			V
Power-Up			1	mSec
Data Rate	50		9,600	bps
Operating Temperature	-25		+80	°C

RT14: Electrical Characteristics

Ambient temp = 25 °C unless otherwise stated.

Characteristic	Min.	Typ.	Max.	Dimensions
Supply Voltage	2		9	Vdc
Supply Current (Vcc=5V IN=1kHz)		8		mA
Working Frequency		433.92		MHz
RF Output Power into 50Ω (Vcc=4V)	+10	+12		dBm
Harmonic Spurious Emissions		-55		dBc
Input Voltage High	2		Vcc	V
Data Rate	50		9,600	Hz
Operating Temperature	-25		+80	°C

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