



Version	Frequency
BR17L3	433.05 – 434.79 MHz
BR18L3	868 – 870 MHz

PERFORMANCE DATA	
Operating supply range	2,7 ÷ 5,5 VdC
Supply current	200 µA (3 Vdc)
Sensitivity	-96 dBm (ASK)
Data baud-rate (no squelch)	9600 Baud , max.
Data baud-rate (squelched)	1200 Baud , max.
Start – up time (pulsed)	30 ms
Dimensions	11 x 19,5 x 2,3 mm

INTRODUCTION

The BR17L3 and BR18L3 modules are low-cost, miniature, low consumption superregenerative data receivers.

The modules are a totally new receiver design with high sensitivity (-96 dBm), high data rates (to 9,6 KB unsquelched) , very low current (200 microA – 3Vdc) and a broad supply voltage range (2,7 to 5,5 V).

They are ideally suited for use in “short range” battery powered wireless applications.

The low current consumption can be further reduced in a pulsed “power save” operation (only 30 ms of pulsed settling time).

NOTE:

The BR17 and BR18 are a low current consumption superregenerative ASK/OOK data receivers.

Preliminary notes:

1. Do not reverse DC polarity.
2. Do not short circuit “RXD” data output. The IC1 comparator is a low consumption (10 µA) “C-MOS” integrated circuit – An 1KΩ (or higher value) resistor in series with “RXD” output is recommended.
3. With PIN 5 to ground output random pulses are minimized at the expense of reduced sensitivity and lower usable data-speed.

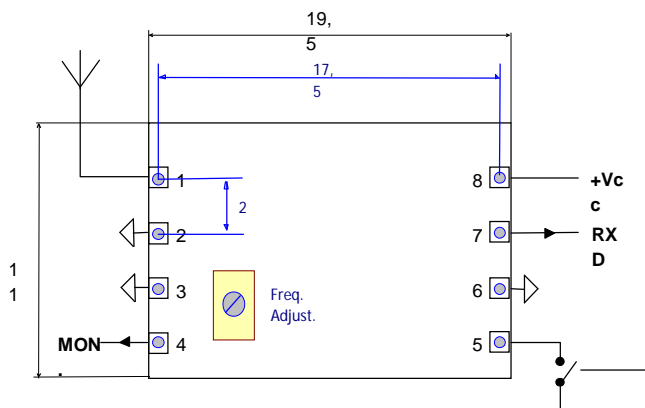
Best results (high sensitivity and max data speed) are obtained with PIN5 (hysteresis) open.

Without hysteresis a continuous flow of random pulses is present on “RXD” output in absence of “RF” signal. A software filter can be employed to discriminate useful datas.

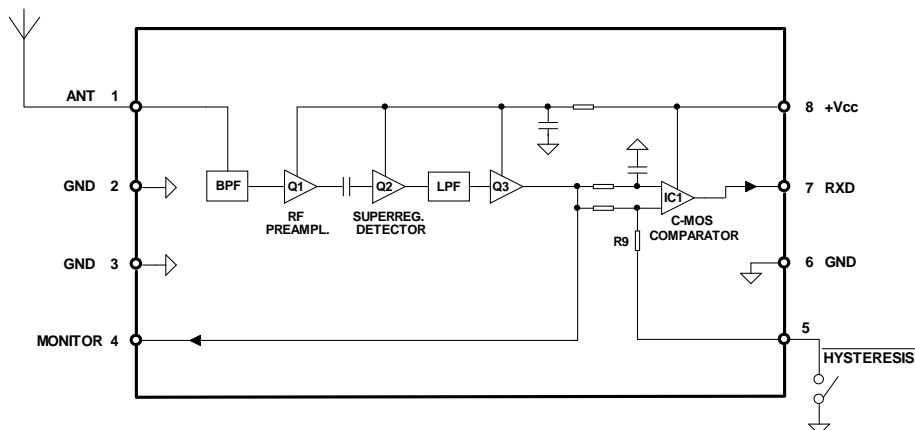
Notes on messages:

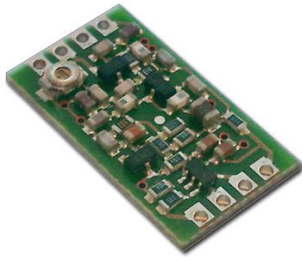
1. The message should always start with a correct PREAMBLE of at least 20 ms (normally a square wave).
2. After the PREAMBLE a START “BYTE” must be sent, in a way to be decoded by the Microcontroller as “DATA” START TIME
3. In the “DATA” decoding process must be kept in account the “JITTER” (always resulting over a weak radio signal) and “DISTORTION” on the pulses length caused by multipath propagation.
4. Manchester code is the preferred data encoding system; but other “RZ” codes can be employed: the 1/3-2/3 encoding system is a good solution.
5. “NRZ codes (the “RS232” format) must be avoided.

BR1xx Dimensions



BR17L3 / BR18L3 Block diagram





Version	Frequency
BR19L3-P	915 MHz

INTRODUCTION

The BR19L3-P modules are low-cost, miniature, low consumption superregenerative data receivers. BR19 employs a new circuit design to obtain an unusual high data rate speed with the very low cost and current consumption typical to superregenerative Rx.

NOTE:

The BR19 is a low current consumption superregenerative ASK/OOK data receiver.

Preliminary notes:

1. Do not reverse DC polarity.
2. Do not short circuit "RXD" data output. The IC1 comparator is a low consumption (10 μ A) "C-MOS" integrated circuit – An 1K Ω (or higher value) resistor in series with "RXD" output is recommended.
3. With PIN 5 to ground output random pulses are minimized at the expense of reduced sensitivity and lower usable data-speed.

Best results (high sensitivity and max data speed) are obtained with PIN5 (hysteresis) open.

Without hysteresis a continuous flow of random pulses is present on "RXD" output in absence of "RF" signal. A software filter can be employed to discriminate useful datas.

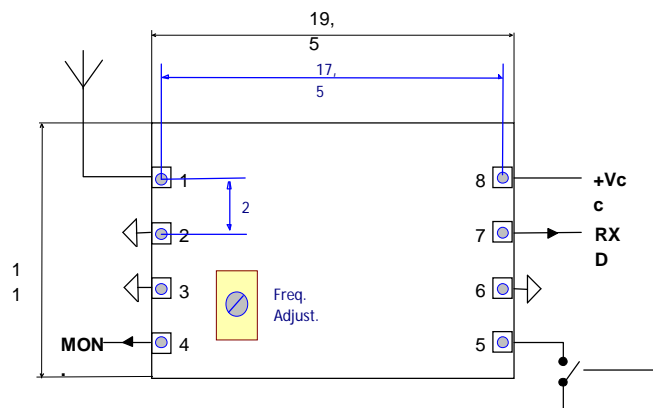
Notes on messages:

1. The message should always start with a correct PREAMBLE of at least 20 ms (normally a square wave).
2. After the PREAMBLE a START "BYTE" must be sent, in a way to be decoded by the Microcontroller as "DATA" START TIME
3. In the "DATA" decodifying process must be kept in account the "JITTER" (always resulting over a weak radio signal) and "DISTORTION" on the pulses length caused by multipath propagation.
4. Manchester code is the preferred data encoding system; but other "RZ" codes can be employed: the 1/3-2/3 encoding system is a good solution.
5. "NRZ codes (the "RS232" format) must be avoided.

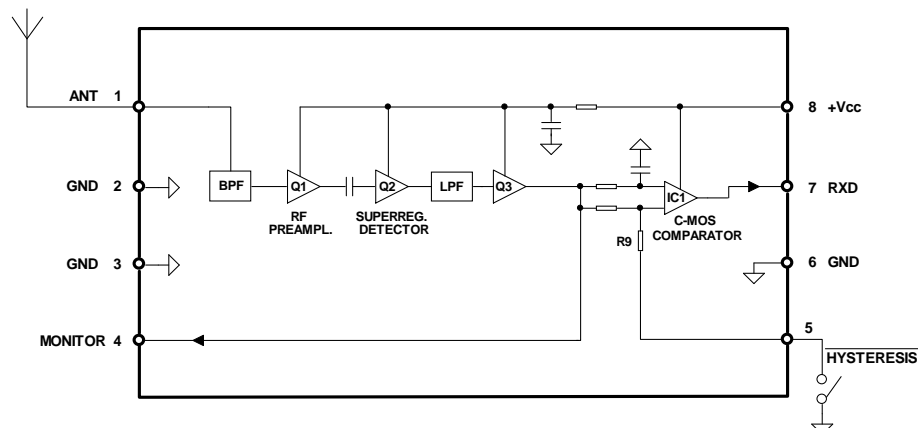
PERFORMANCE DATA

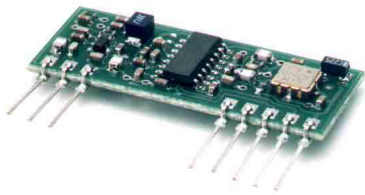
Operating supply range	2,7 \div 5,5 Vdc
Supply current	200 μ A (3 Vdc) – 400 μ A (5 Vdc)
Sensitivity (without Hyst.)	-95 dBm (ASK)
Sensitivity (with Hyst.)	-90 dBm (ASK)
Data baud-rate	50-9600 Baud , max.
Start – up time (pulsed)	30 ms
Dimensions	11 x 19,5 x 2,3 mm

BR19 Dimensions



BR19L3-P Block diagram





Version	Frequency
BR27	433.05 – 434.79 MHz
BR28	868 – 870 MHz

General Description

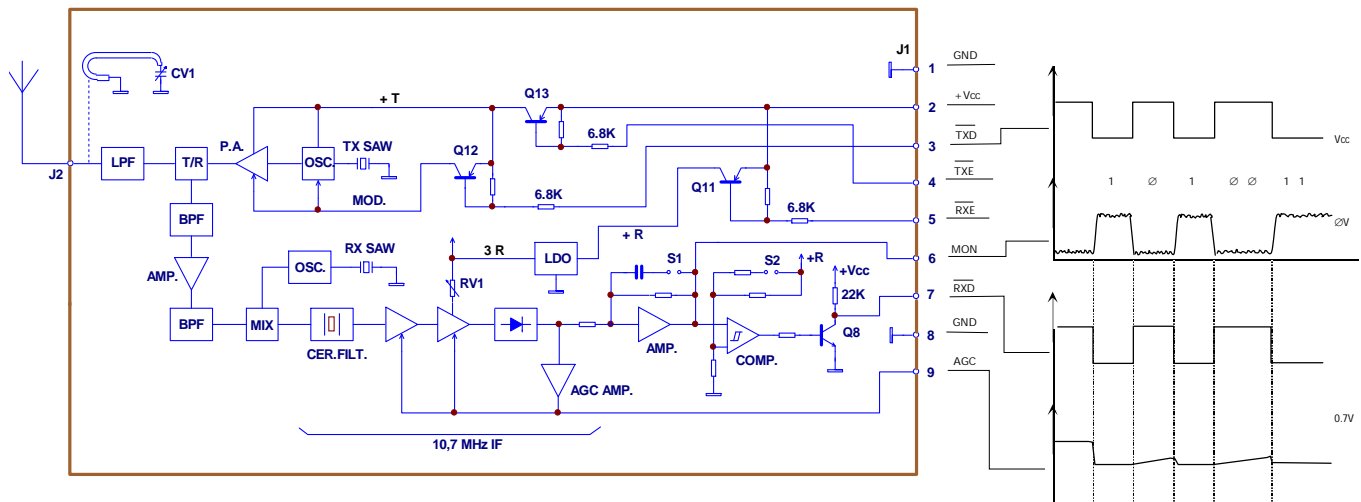
The BR27 module is a complete ASK superhet UHF data receiver with SAW controlled local oscillator.

The BR27 is ideally suited to a variety of remote controls, alarms or monitoring wireless applications.

Two LC tuned bandpass filters in the RF preamplifiers stage help to attenuate strong out of band interfering signals.

The module needs a single 5 VDC supply with very low current consumption.

- SAW CONTROLLED SUPERETHERODYNE
- OOK AND GASK MODULATION
- -103 dBm SENSITIVITY
- TWO LC BANDPASS RF FILTERS
- 5VDC –6mA SUPPLY



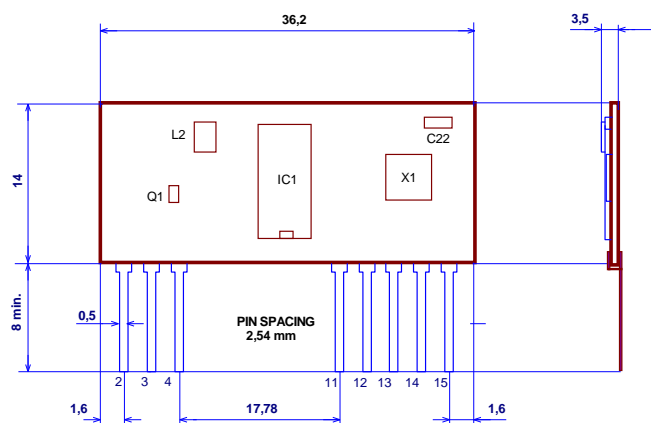
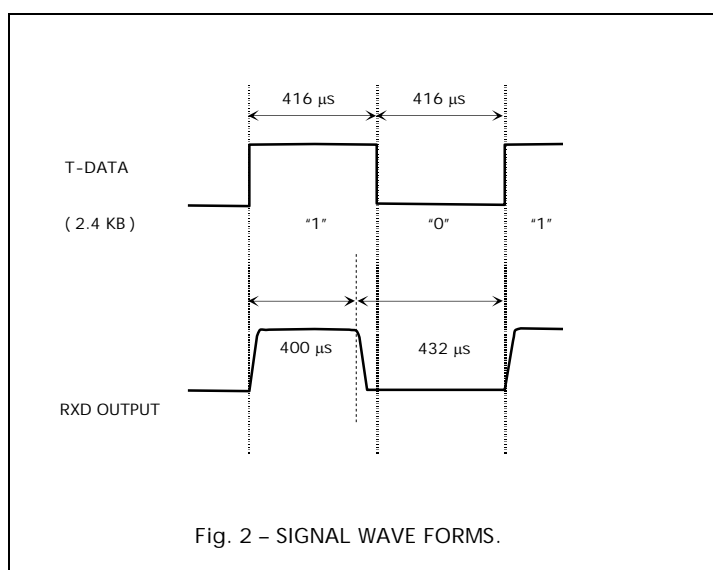
BR27 - PERFORMANCE DATA					
	Min	Typ	Max	Units	Notes
▪ FREQUENCY		433.92		MHz	
▪ SENSITIVITY	-100	-103		dBm	(1)
▪ IF BANDWIDTH		800		KHz	
▪ DYNAMIC RANGE	75	80		dB	
▪ SPURIOUS EMISSION			-60	dBm	
▪ IMPEDANCE		50		Ω	
▪ DATA RATE	50		4800	baud	(2)
▪ DATA MARK/SPACE	20		80	%	(3)
▪ START UP TIME		50		ms	
▪ OPERATING SUPPLY VOLTAGE	4,5	5	5,5	V	
▪ SUPPLY CURRENT		6	7.5	mA	
▪ OPERATING TEMPERATURE	-20		+60	$^{\circ}\text{C}$	

NOTE :

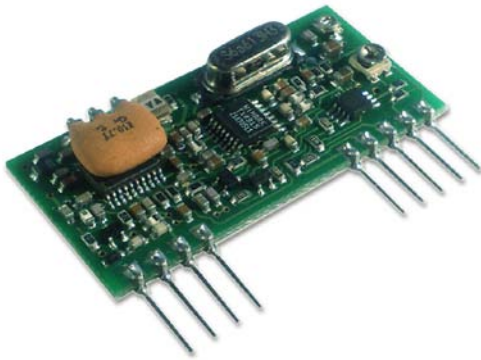
(1) 1.2 KB – BER 1%.

(2) 50/50 MARK/SPACE DATA PATTERN (25-2400 Hz).

(3) AVERAGED OVER ANY 20 ms PERIOD.



PIN DESCRIPTION		
PIN 2	GND	Rf Ground
PIN 3	ANT	Rf Input
PIN 4	GND	Rf Ground
PIN 11	GND	Ground
PIN 12	N.U.	
PIN 13	MON	Analogue Output
PIN 14	RXD	Data Output
PIN 15	VCC	Dc Supply



- XTAL CONTROLLED ON 35 CHANNELS.
- SUPERHETERODYNE WITH "SAW" FILTER.
- FM-FSK MODULATION.
- -108 dBm SENSITIVITY.
- HIGH SELECTIVITY (± 20 KHz).
- FAST DATA RATE (19.2 KB).

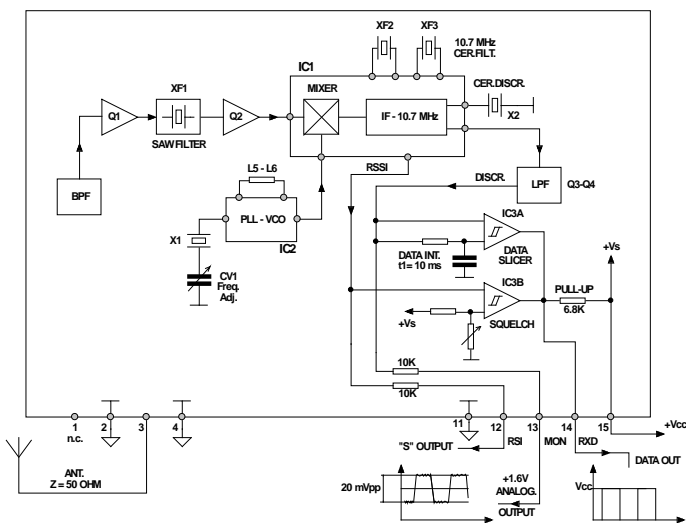
Version	Frequency	Voltage
BR37S3-F4	433,225 MHz	3 VDC
BR37S3-F18	433,925 MHz	3 VDC
BR37S3-F23	433,175 MHz	3 VDC
BR37S5-F4	433,225 MHz	5 VDC
BR37S5-F18	433,925 MHz	5 VDC
BR37S5-F23	433,175 MHz	5 VDC

Pin Description		
Pin 1	N.C.	
Pin 2	GND	RF GROUND
Pin 3	ANT	RF INPUT
Pin 4	GND	RF GROUND
Pin 11	GND	GROUND
Pin 12	RSI	REC. SIGN. STRENGTH
Pin 13	MON	ANALOG INPUT
Pin 14	RXD	DATA INPUT
Pin 15	VCC	Dc SUPPLY

	Min	Typ	Max	Units	Notes
Frequency	433.05		434.79	MHz	(1)
Sensitivity	-104	-109		dBm	(2)
Selectivity		±20	±25	KHz	
Frequency Accuracy		±3	±5	KHz	(3)
Dynamic Range	90	100		dB	
Spurious Emission		-70	-60	dBm	
Image Rejection		30		dB	
Impedance		50		Ω	
Squelch Threshold		-110		dBm	(4)
Data Rate	100		19200	Baud	(5)
Data Mark/Space	30		70	%	(6)
Start-Up Time		30		Ms	(7)
Supply Voltage: Br37s3	2.75	3	3.6	V	
Supply Voltage Br37s5	4.5	5	5.5	V	
Supply Current		17	21	mA	
Operating Temperature	-20		+60	°C	

Note:

- (1) CHANNEL SEPARATION = 50 KHz.
- (2) 4.8 Kb - BER 1 %.
- (3) OVER OPERATING TEMPERATURE RANGE.
- (4) Adj. -70, -115 dBm.
- (5) 50/50 MARK/SPACE DATA PATTERN.
- (6) DATA PULSE TIME: Min. 50µs - Max. = 20 ms.
- (7) PULSED - FROM POWER-UP TO VALID DATA.



BR37S Block diagram

DESCRIPTION :

The BR37S module is a complete FM Superhet Receiver with a precision, low noise, crystal controlled "PLL" local oscillator.

The module operates on the "SRD" 433.05 – 434.79 MHz band with a selectivity of ±20 KHz allowing the use of 35 different frequency channels and greatly reducing the in-band interferences from RF signals or broadband noise.

A "SAW" filter in the receiver front-end is employed to attenuate image and out of band signals.

The module needs a single 5VDC supply (BR37S5) or a 3VDC supply (BR37S3) and has three outputs: [1] a digital data output (RXD) from a self centering comparator / data slicer controlled by an adjustable (RV1) level squelch circuit, [2] a linear analogue output (MON) for monitor and test purposes, [3] a received signal strength indicator (RSI) output.

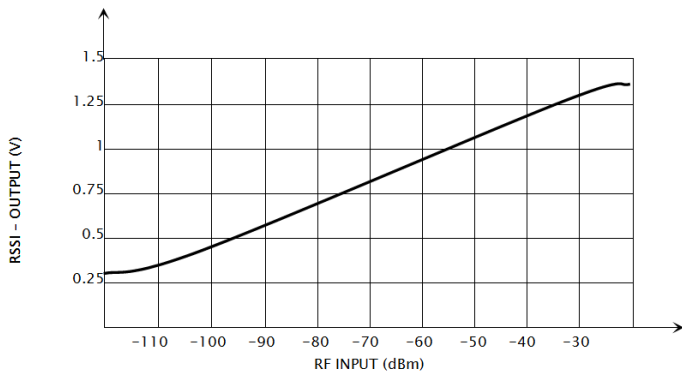
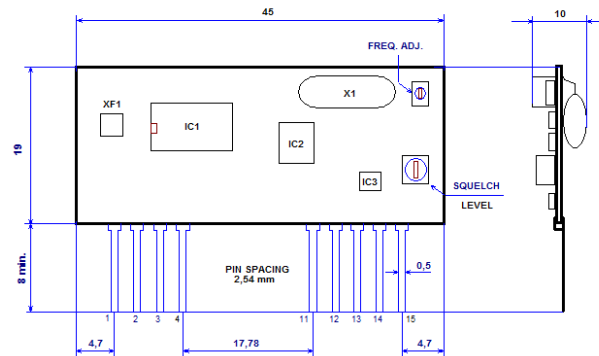


FIG. 3 – RSSI (RECEIVED SIGNAL STRENGTH) VOLTAGE (ON PIN 12 – LOAD >100kΩ)



BR375 Dimensions

APPLICATION NOTE:

Data transmission protocol must take into account that the receiver slicer is optimised for data waveforms with 50/50 duty cycle averaged on a 10 ms period.

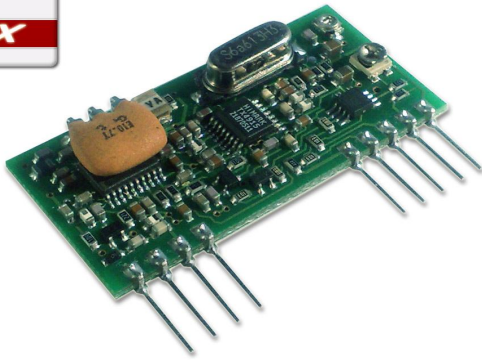
Bi-phase “RZ” data encoding (Manchester or differential bi-phase) is recommended to maintain symmetry. Other encoding systems (for example the popular 1/3, 2/3 pulse width modulation) can be employed with reduced performances.

The message must start with an appropriate “preamble” of at least 5 ms (a square wave) to allow for data slicer to stabilize: after a start BIT or BYTE, data message can follow. “Gaps” between successive data blocks must be avoided.

The Squelch system threshold is factory adjusted to a received signal level of about -115 dBm: for different levels adjustments (RV1) please contact factory.

Should be clear that, in absence of a Tx carrier, an high sensitivity receiver has an high probability to output noise (or interferences) random pulses.



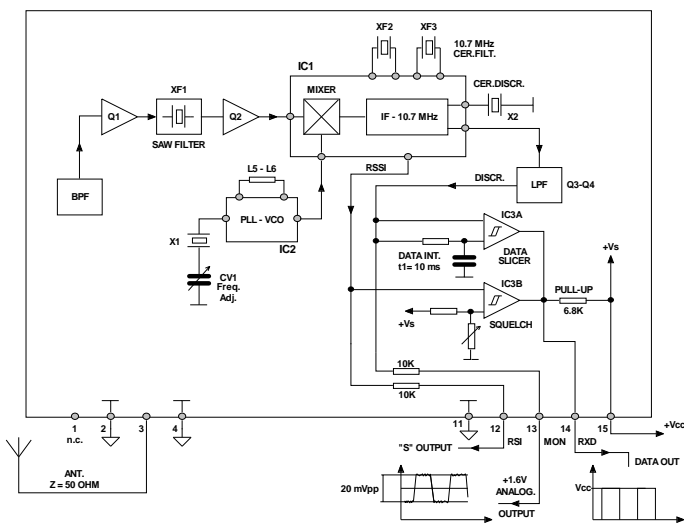


Version	Frequency	Voltage	
BR38S3-F171	868,525 MHz	3 VDC	-107 dBm (Sub-Band f)
BR38S3-F195	469,725 MHz	3 VDC	-107 dBm (Sub-Band k)
BR38S5-F171	868,525 MHz	5 VDC	-108 dBm (Sub-Band f)
BR38S5-F195	869,725 MHz	5 VDC	-108 dBm (Sub-Band k)

- XTAL CONTROLLED ON 35 CHANNELS.
- SUPERHETERODYNE WITH "SAW" FILTER.
- FM-FSK MODULATION.
- -108 dBm SENSITIVITY.
- HIGH SELECTIVITY (± 20 KHz).
- FAST DATA RATE (19.2 KB).

Pin Description		
Pin 1	N.C.	
Pin 2	GND	RF GROUND
Pin 3	ANT	RF INPUT
Pin 4	GND	RF GROUND
Pin 11	GND	GROUND
Pin 12	RSI	REC. SIGN. STRENGTH
Pin 13	MON	ANALOG INPUT
Pin 14	RXD	DATA INPUT
Pin 15	VCC	Dc SUPPLY

Performance data					
	Min	Typ	Max	Units	Notes
Frequency	868		870	MHz	(1)
Sensitivity	-104	-108		dBm	(2)
Selectivity		±20	±25	KHz	
Frequency Accuracy		±5	±10	KHz	(3)
Dynamic Range	90	100		dB	
Spurious Emission		-70	-60	dBm	
Image Rejection		30		dB	
Impedance		50		Ω	
Squelch Threshold		-110		dBm	(4)
Data Rate	100		19200	Baud	(5)
Data Mark/Space	30		70	%	(6)
Start-Up Time		30		Ms	(7)
Supply Voltage: Br38s3	2.75	3	3.6	V	
Supply Voltage Br38s5	4.5	5	5.5	V	
Supply Current		18	22	mA	
Operating Temperature	-20		+60	°C	
Note:	(1) CHANNEL SEPARATION = 50 KHz. (2) 4.8 Kb - BER 1 %. (3) OVER OPERATING TEMPERATURE RANGE.		(4) Adj. -70, -115 dBm. (5) 50/50 MARK/SPACE DATA PATTERN. (6) DATA PULSE TIME: Min. 50µs - Max. = 20 ms. (7) PULSED - FROM POWER-UP TO VALID DATA.		



BR38S Block diagram

DESCRIPTION :

The BR38S module is a complete FM Superhet Receiver with a precision, low noise, crystal controlled "PLL" local oscillator.

The module operates on the "SRD" 868-870 MHz band with a selectivity of ±20 KHz allowing the use of 35 different frequency channels and greatly reducing the in-band interferences from RF signals or broadband noise.

A "SAW" filter in the receiver front-end is employed to attenuate image and out of band signals.

The module needs a single 5VDC supply (BR38S5) or a 3VDC supply (BR38S3) and has three outputs: [1] a digital data output (RXD) from a self centering comparator / data slicer controlled by an adjustable (RV1) level squelch circuit, [2] a linear analogue output (MON) for monitor and test purposes, [3] a received signal strength indicator (RSI) output.

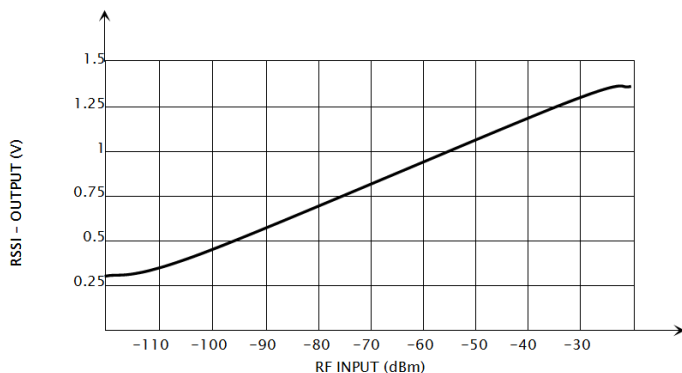
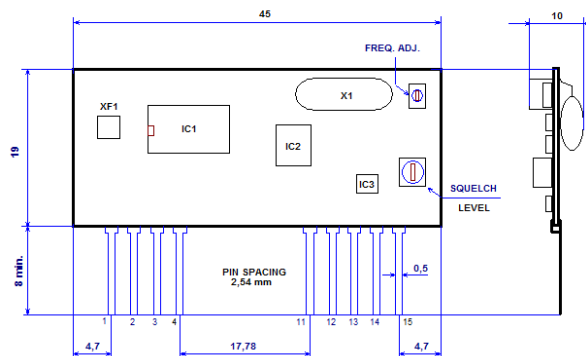


FIG. 3 - RSSI (RECEIVED SIGNAL STRENGTH) VOLTAGE (ON PIN 12 - LOAD >100KΩ)



BR38S Dimensions

APPLICATION NOTE:

Data transmission protocol must take into account that the receiver slicer is optimised for data waveforms with 50/50 duty cycle averaged on a 10 ms period.

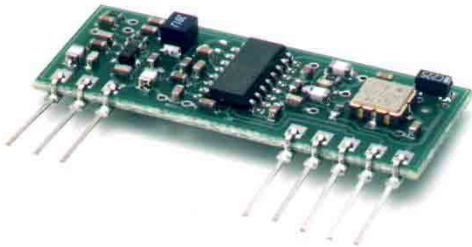
Bi-phase "RZ" data encoding (Manchester or differential bi-phase) is recommended to maintain symmetry. Other encoding systems (for example the popular 1/3, 2/3 pulse width modulation) can be employed with reduced performances.

The message must start with an appropriate "preamble" of at least 5 ms (a square wave) to allow for data slicer to stabilize: after a start BIT or BYTE, data message can follow. "Gaps" between successive data blocks must be avoided.

The Squelch system threshold is factory adjusted to a received signal level of about -115 dBm: for different levels adjustments (RV1) please contact factory.

Should be clear that, in absence of a Tx carrier, an high sensitivity receiver has an high probability to output noise (or interferences) random pulses.



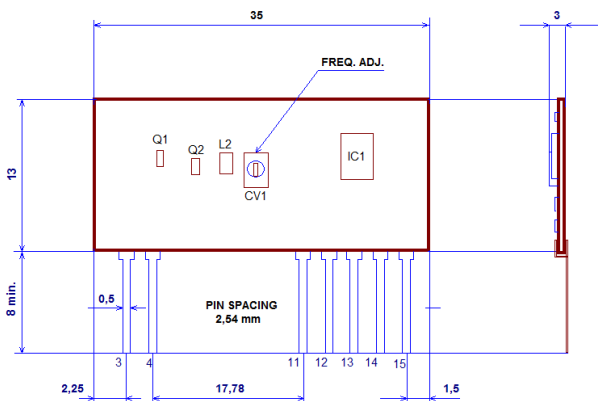


Version	Frequency	Voltage	
BR47A5 (1)	433.92 MHz	5 VDC	0.9 mA
BR47L5 (1)	469,725 MHz	5 VDC	330 microA
BR47L3	433.92 MHz	3 VDC	270 microA
Note	1) STANDARD VERSIONS WITH EX STOCK AVAILABILITY. PLEASE CONTACT THE FACTORY FOR SAMPLES AND AVAILABILITY OF NON STANDARD VERSIONS.		

- SUPERREGENERATIVE DETECTOR
- OOK AND GASK MODULATION
- HIGH SENSITIVITY (-94dBm)
- LOW CURRENT CONSUMPTION

Performance data						
		Min	Typ	Max	Units	Notes
Frequency		433.050	433.925	434.790	MHz	
Sensitivity	BR47A5 BR47L5 BR47L3	-91 -91 -89	-94 -94 -92		dBm	(1)
Selectivity			±2		MHz	
Dynamic Range		80	90		dB	
Impedance			50		Ω	
Data Rate		150		2400	baud	(2)
Data Mark/Space		20		80	%	(3)
Data set. Time power up			100		ms	
Pulsed data settling time				70	ms	
Data out high level	BR47A5 BR47L5 BR47L3	V _{cc} – 1.5 V _{cc} – 1.5 V _{cc} – 1			v	(4)
Supply Voltage	BR47A5 BR47L5 BR47L3	4.5 4.5 2.7	5 5 3	5.5 5.5 5.5	v	
Supply Current	BR47A5 BR47L5 BR47L3		0.9 330 270		mA microA microA	
Operating Temperature		-20		+60	°C	
Note:	(1) OOK MODULATION – BER 1%. (2) 50/50 MARK/SPACE DATA PATTERN (75-1200Hz). (3) DATA PULSE TIME: MIN.= 200µs, MAX.=100ms.			(4) LOAD IMPEDANCE >10 KΩ.		

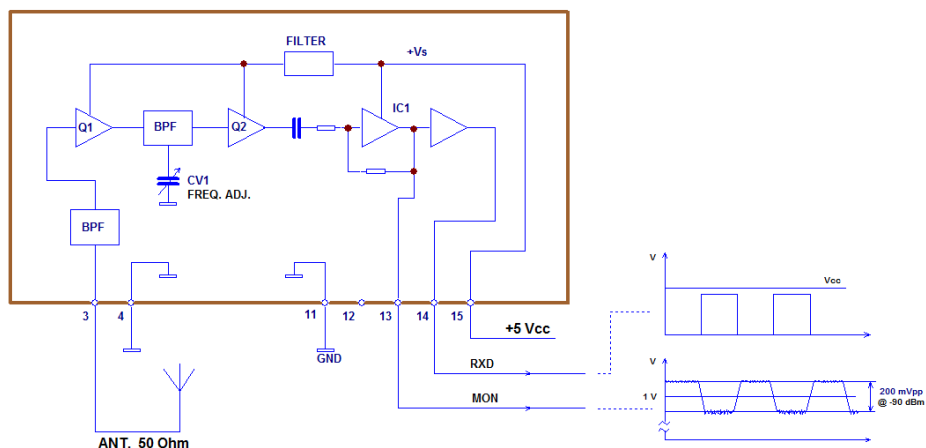
Pin Description		
Pin 3	ANT	RF INPUT
Pin 4	GND	RF GROUND
Pin 11	GND	GROUND
Pin 12	N.U.	
Pin 13	MON	ANALOG OUTPUT
Pin 14	RXD	DATA OUTPUT
Pin 15	VCC	+Vdc



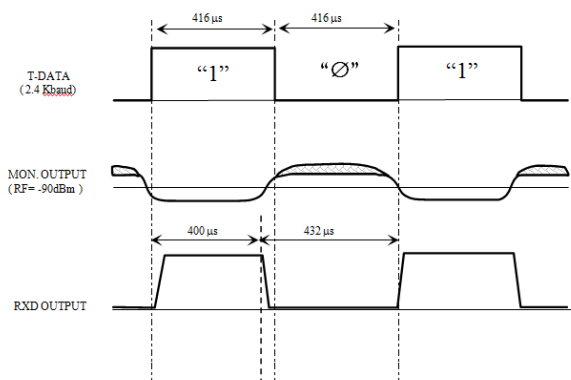
BR47S Dimensions

DESCRIPTION :

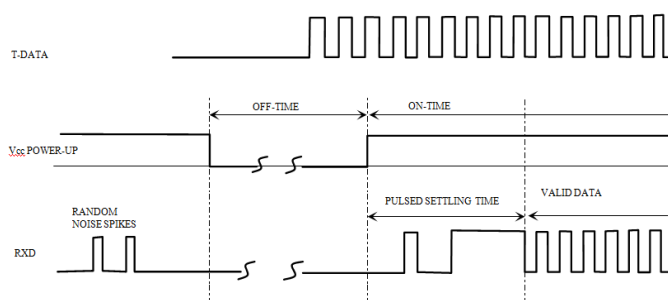
The BR47 series is based on a simple but highly optimised superregenerative receiver architecture to achieve good sensitivity at a very low power consumption. The receiver has two LC bandpass filters in the RF preamplifier stage to improve the out-of band strong signals rejection. A precision chip trimmer capacitor (CV1 – MURATA TZVY2) is employed to obtain an accurate and stable tune on the receive frequency.



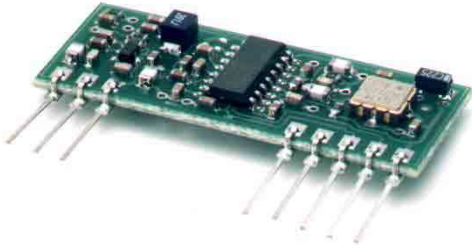
BR47 Block diagram



Timing Waveforms



Power Up And Data Settling Time

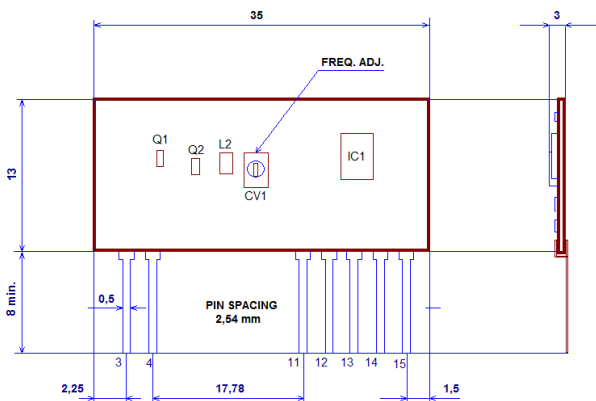


Version	Frequency	Voltage	
BR48A5 (1)	868.35 MHz	5 VDC	0.9 mA
BR48L5 (1)	868.35 MHz	5 VDC	330 microA
BR48L3	868.35 MHz	3 VDC	270 microA
Note	1) STANDARD VERSIONS WITH EX STOCK AVAILABILITY. PLEASE CONTACT THE FACTORY FOR SAMPLES AND AVAILABILITY OF NON STANDARD VERSIONS.		

- SUPERREGENERATIVE DETECTOR
- OOK AND GASK MODULATION
- HIGH SENSITIVITY (-94dBm)
- LOW CURRENT CONSUMPTION

Performance data						
		Min	Typ	Max	Units	Notes
Frequency		868	868.35	870	MHz	
Sensitivity	BR48A5	-90	-94		dBm	(1)
	BR48L5	-90	-94			
	BR48L3	-89	-90			
Selectivity			±4		MHz	
Dynamic Range		80	90		dB	
Impedance			50		Ω	
Data Rate		150		2400	baud	(2)
Data Mark/Space		20		80	%	(3)
Data set. Time power up			100		ms	
Pulsed data settling time				70	ms	
Data out high level	BR48A5	V _{cc} – 1.5			v	(4)
	BR48L5	V _{cc} – 1.5				
	BR48L3	V _{cc} – 1				
Supply Voltage	BR48A5	4.5	5	5.5	v	
	BR48L5	4.5	5	5.5		
	BR48L3	2.7	3	5.5		
Supply Current	BR48A5		0.9		mA	
	BR48L5		400		microA	
	BR48L3		340		microA	
Operating Temperature		-20		+60	°C	
Note:	(1) OOK MODULATION – BER 1%. (2) 50/50 MARK/SPACE DATA PATTERN (75-1200Hz). (3) DATA PULSE TIME: MIN.= 200µs, MAX.=100ms.			(4) LOAD IMPEDANCE >10 KΩ.		

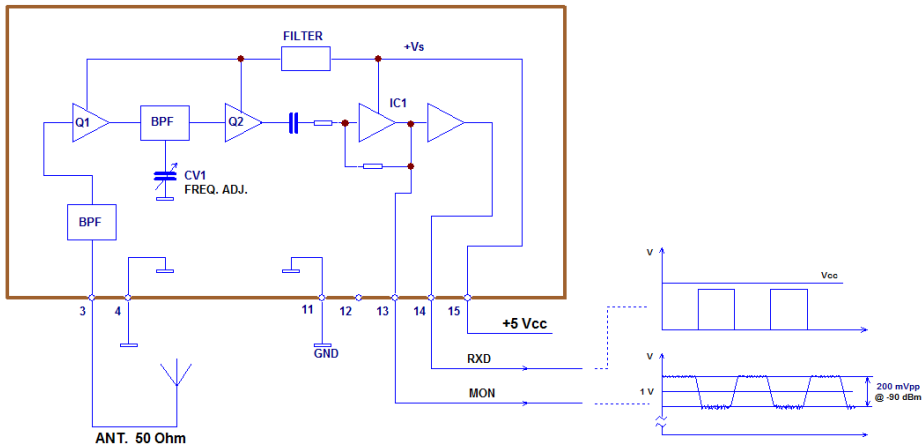
Pin Description		
Pin 3	ANT	RF INPUT
Pin 4	GND	RF GROUND
Pin 11	GND	GROUND
Pin 12	N.U.	
Pin 13	MON	ANALOG OUTPUT
Pin 14	RXD	DATA OUTPUT
Pin 15	VCC	+Vdc



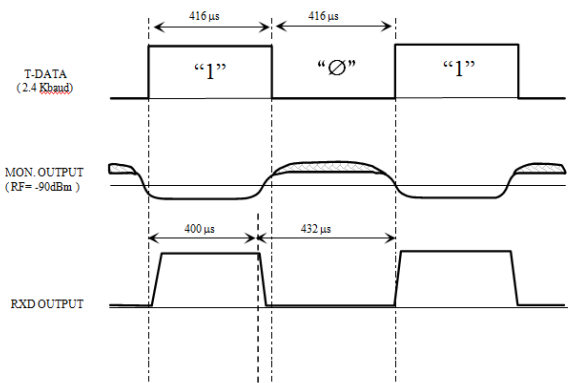
BR48 Dimensions

DESCRIPTION :

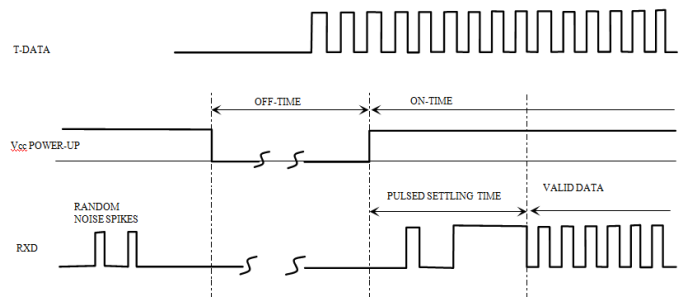
The BR48 series is based on a simple but highly optimised superregenerative receiver architecture to achieve good sensitivity at a very low power consumption. The receiver has two LC bandpass filters in the RF preamplifier stage to improve the out-of band strong signals rejection. A precision chip trimmer capacitor (CV1 – MURATA TZVY2) is employed to obtain an accurate and stable tune on the receive frequency.



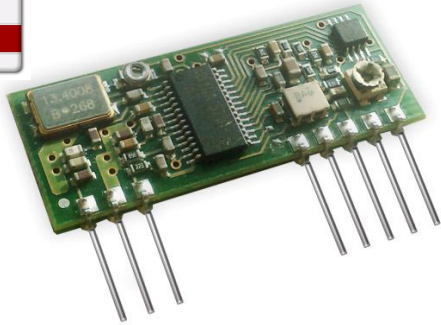
BR48 Block diagram



Timing Waveforms



Power Up And Data Settling Time

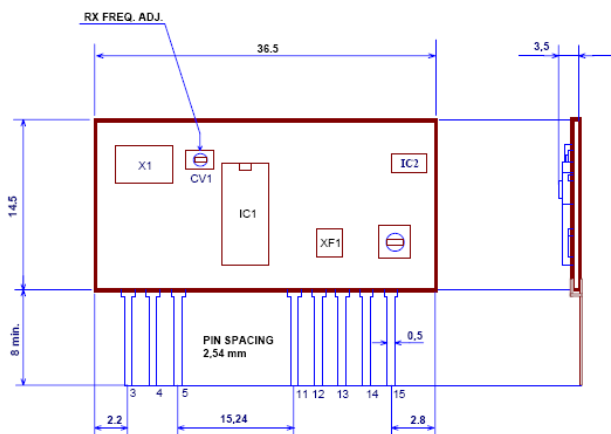


**LOW COST, HIGH PERFORMANCES DATA RECEIVER
BASED ON TDA 525x INTEGRATED CIRCUIT BY
INFINEON**

- LOW COST
- XTAL CONTROLLED
- SUPERHETERODYNE
- OOK AND GASJ MODULATION
- -106 dBm SENSITIVITY
- HIGH SELECTIVITY (± 85 KHz)

Performance data	
Frequency	433.050 – 434.790
Sensitivity	-106 dBm
Selectivity	± 150 KHz
Modulation	ASK ("A" Version) - FSK ("F" Version)
Max Data Rate	9,2 KB
Supply Voltage	2,6 – 5,5 VDC
Supply Current	10 mA
Operating temperature	-20 +60°C
Dimensions	36,5 mm x 14,5 mm x 3,5 mm

Pin Description		
Pin 3	ANT	RF INPUT
Pin 4	GND	RF GROUND
Pin 5	RXE	RX ENABLE
Pin 11	GND	GROUND
Pin 12	RSI	REC. SIGN. STRENGHT
Pin 13	MON	ANALOG OUTPUT
Pin 14	RXD	DATA OUTPUT
Pin 15	VCC	DC SUPPLY



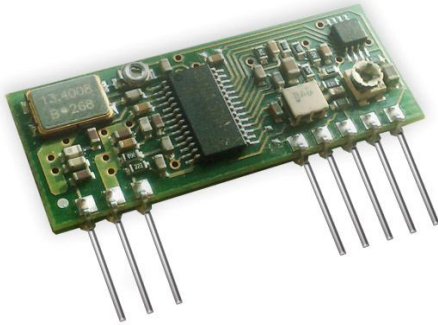
BR57 Dimensions

DESCRIPTION :

The BR57T and P version is designed around the INFINEON TDA5255 PLL, Xtal controlled single conversion superheterodyne receiver IC. The receiver utilizes an advanced ASK or FSK modulation for better rejection of multipath propagation signal distortion.

The BR57 is properly designed to work with the matching transmitter BT57 S, but is also compatible with low cost saw transmitters (BT27 – BT17) and with BK5xx Transceivers.

Additionally an "RSSI" (Received Signal Strength indicator) output is available on PIN 12. The BR57 T is implemented by a sophisticated adjustable level data "Squelch" system.

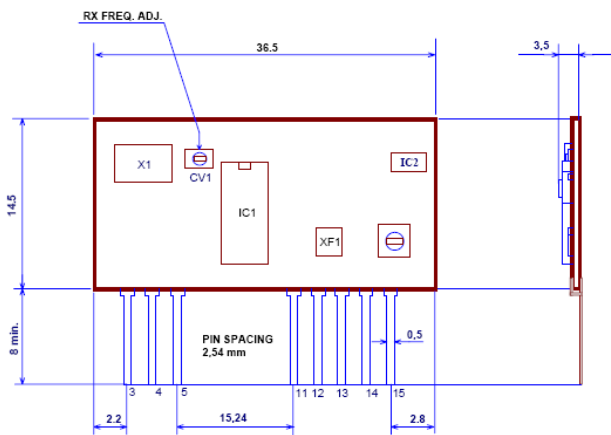


BR58 S VERSIONS		
Version	Frequency	Voltage
BR58S5 – M1	868.150 MHz	5 VDC
BR58S5 – M2 (1)	868.350 MHz	5 VDC
BR58S5 – M3	868.550 MHz	5 VDC
BR58S5 – M4	868.750 MHz	5 VDC
BR58S5 – M5(1)	868.950 MHz	5 VDC
BR58S5 – M6	869.150 MHz	5 VDC
BR58S5 – M8	869.550 MHz	5 VDC
BR58S5 – M9	869.850 MHz	5 VDC
Note (1)	STANDARD VERSIONS WITH EX STOCK AVAILABILITY. PLEASE CONTACT THE FACTORY FOR SAMPLES AND AVAILABILITY OF NON STANDARD VERSIONS.	

- XTAL CONTROLLED
- SUPERHETERODYNE
- OOK AND GASJ MODULATION
- -106 dBm SENSITIVITY
- HIGH SELECTIVITY (± 85 KHz)
- FAST DATA RATE (28.8 KB)

Pin Description		
Pin 3	ANT	RF INPUT
Pin 4	GND	RF GROUND
Pin 5	RXE	RX ENABLE
Pin 11	GND	GROUND
Pin 12	RSI	REC. SIGN. STRENGHT
Pin 13	MON	ANALOG OUTPUT
Pin 14	RXD	DATA OUTPUT
Pin 15	VCC	DC SUPPLY

Performance data					
	Min	Typ	Max	Units	Notes
Frequency	868		870	MHz	(1)
Sensitivity	-100	-104		dBm	(2)
Selectivity		± 75	± 90	KHz	
Frequency accuracy		± 20	± 30	KHz	(3)
Dynamic range	80	90		dB	
Sporious emission		-90	-70	dBm	
Image rejection		8		dB	
Impedance		50		Ω	
Data rate	50		28800	baud	(4)
Data mark / space	20		80	%	(5)
Data settling time		5	7	ms	(6)
Data squelch threshold	-110	-106	-80	dBm	
Operating supply voltage	4,5	5	5,5	V	
Supply current		6	7	mA	
Operating temperature	-20		+60	$^{\circ}\text{C}$	
Note:	(1) CHANNEL SEPARATION = 200 KHz. (2) 9,6 K B - BER 1 %. (3) OVER OPERATING TEMPERATURE RANGE.			(4) 50/50 MARK/SPACE DATA PATTERN (25-14400 Hz). (5) DATA PULSE TIME Min.= 50 μ s Max. = 25 ms. (6) TIME FROM "RE" (PIN 5 = RX ENABLE) TO VALID DATA.	



BR58 Dimensions

DESCRIPTION :

The BR58 S is designed around the INFINEON TDA5210 PLL, Xtal controlled single conversion superheterodyne receiver IC. The receiver utilizes an advanced ASK Gaussian shaped (GASK) modulation for better rejection of multipath propagation signal distortion. The BR57 S is properly designed to work with the matching transmitter BT57 S up to a max. data speed of 28.8 KB, but it can be also easily matched with BT17x, BT27A (to 2.4 KB) or BT17xS, BT27S (to 28.8 KB) "SAW"controlled transmitter modules. The BR57 S has two "LC" tuned filters in the front-end for best out of band signal rejection and a ceramic filter (MURATA SF ECS 10.7) for a good adjacent channel selectivity. Additionally an "RSSI" (Received Signal Strength indicator) output is available on PIN 12. The BR57 S is implemented by a sophisticated adjustable level data "Squelch" system.

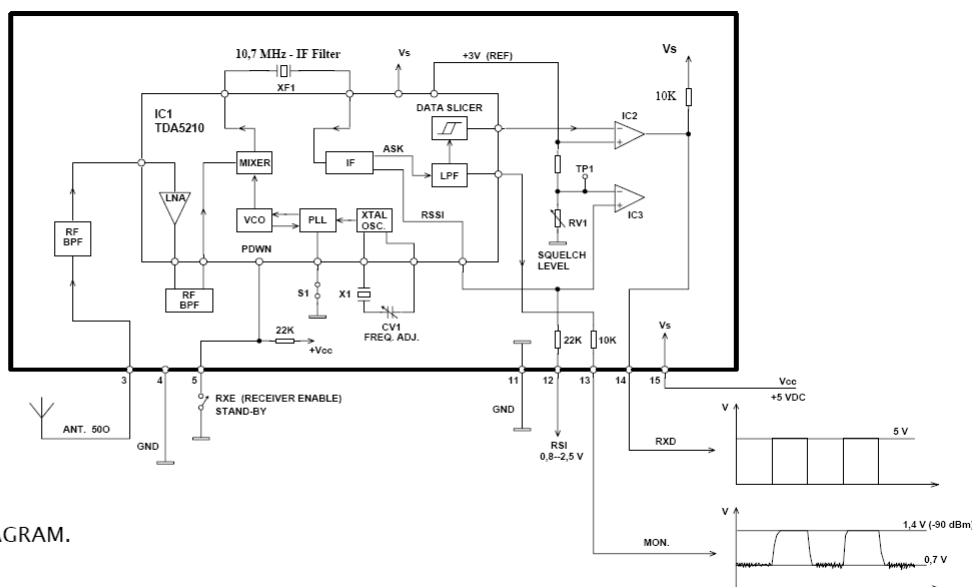
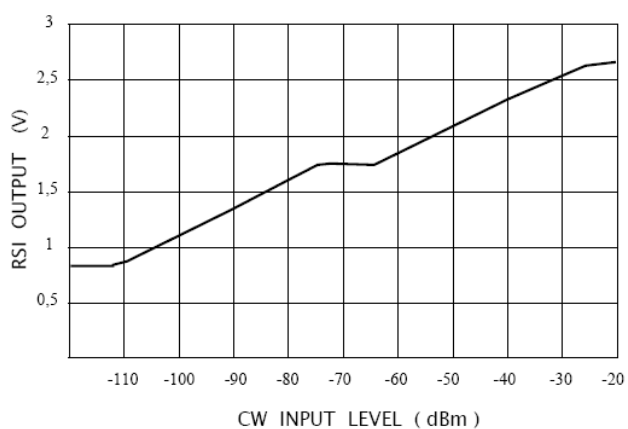
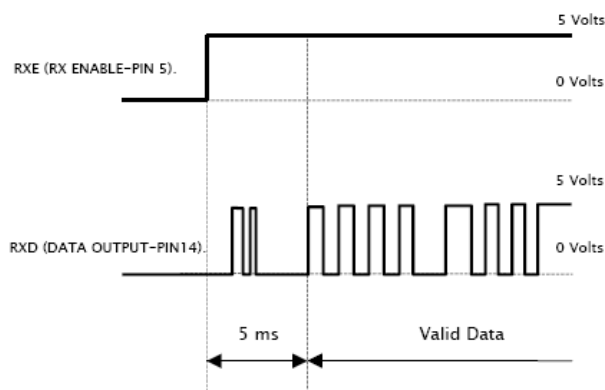


Fig.1 - BR58 S - BLOCK DIAGRAM.



RSSI (Received Sig. Strength) voltage on pin 12 (R Load >100KΩ)



Data Settling Time