

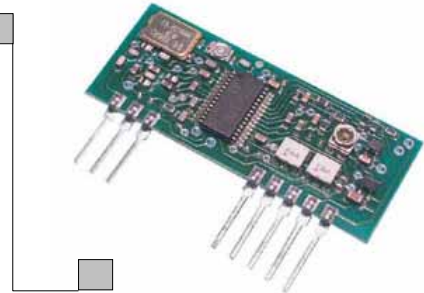
**BR58 S**

**SRD RX XTAL ISM 868 – 870 MHz**

**TABLE 1 - BR58 S VERSIONS**

BR58 S5-M1	868,150 MHz	5VDC
<b>BR58 S5-M2 (1)</b>	<b>868,350 MHz</b>	<b>5VDC</b>
BR58 S5-M3	868,550 MHz	5VDC
BR58 S5-M4	868,750 MHz	5VDC
<b>BR58 S5-M5 (1)</b>	<b>868,950 MHz</b>	<b>5VDC</b>
BR58 S5-M6	869,150 MHz	5VDC
BR58 S5-M8	869,550 MHz	5VDC
BR58 S5-M9	869,850 MHz	5VDC

**NOTE (1) :** STANDARD VERSIONS WITH EX STOCK AVAILABILITY.  
 PLEASE CONTACT THE FACTORY FOR SAMPLES AND AVAILABILITY OF NON STANDARD VERSIONS.



- XTAL CONTROLLED .
- SUPERETHERODYNE.
- OOK AND GASK MODULATION.
- -104 dBm SENSITIVITY.
- HIGH SELECTIVITY ( ± 85 KHz ).
- FAST DATA RATE ( 28.8 KB ).

**DESCRIPTION:**

The BR58 S is designed around the INFINEON TDA5210 PLL, Xtal controlled single conversion superetherodyne receiver IC. The receiver utilizes an advanced ASK Gaussian shaped ( GASK ) modulation for better rejection of multipath propagation signal distortion. The BR58 S is properly designed to work with the matching transmitter BT58 up to a max. data speed of 19.2 KB, but it can be also easily matched with BT18x, BT28A ( to 2.4 KB ) or BT18xS or BT28S ( to 28.8 KB ) "SAW" controlled transmitter modules. The BR58 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 BR58 S is implemented by a sophisticated adjustable level data "Squelch" system.

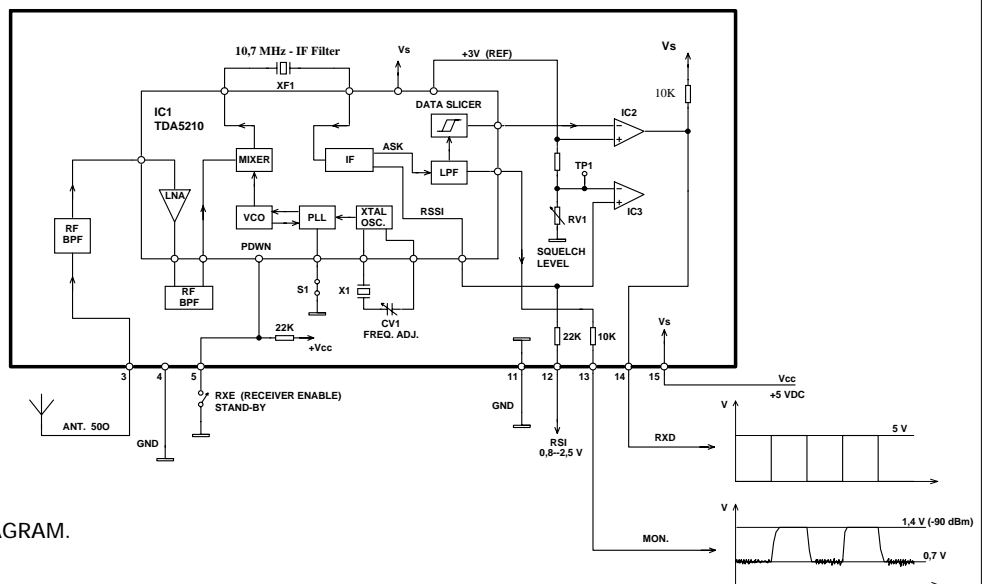


Fig.1 – BR58 S - BLOCK DIAGRAM.

# BR58 S - 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	
▪ SPURIOUS EMISSION		-90	-70	dBm	
▪ IMAGE REJECTION		8		dB	
▪ IMPEDANCE		50		Ω	
▪ DATA RATE	50		28800	baud	(4)
▪ DATA MARK/SPACE	20		80	%	(5)
▪ DATA SETTING 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	°C	

**NOTE:**

(1) CHANNEL SEPARATION = 200 KHz.	(4) 50/50 MARK/SPACE DATA PATTERN (25-14400 Hz).
(2) 9,6 K B - BER 1 %.	(5) DATA PULSE TIME Min. = 50µs Max. = 25 ms.
(3) OVER OPERATING TEMPERATURE RANGE.	(6) TIME FROM "RE" (PIN 5 = RX ENABLE) TO VALID DATA.

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. Strength
PIN 13	MON	Analogue Output
PIN 14	RXD	Data Output
PIN 15	VCC	Dc Supply

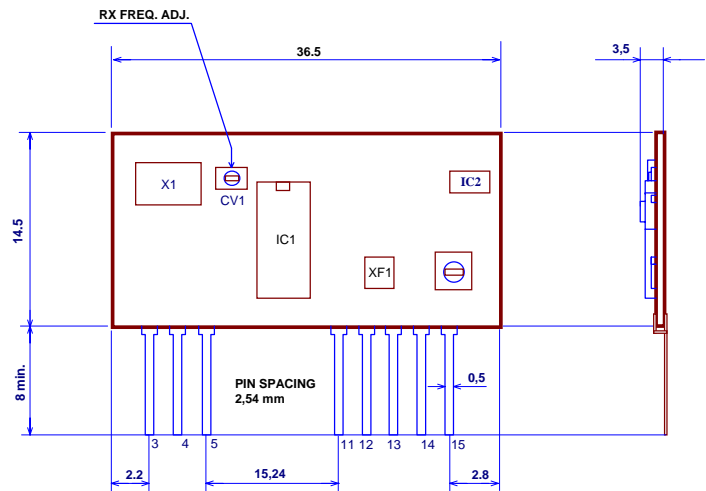


Fig.2 - BR58 S - PHYSICAL DIMENSIONS.

