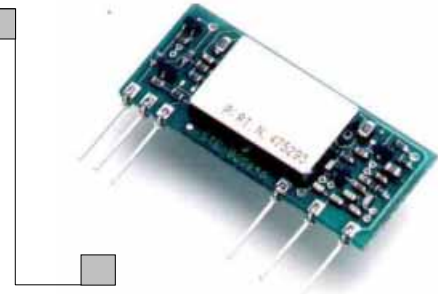


BT58 F			
SRD	TX	XTAL	ISM 868 – 870 MHz

TABLE 1 - BT58 S VERSIONS

Version	Frequency (MHz)	Voltage (VDC)	Power (mW)
BT58 F5-M1	868,150	5	30
BT58 F5-M2 ⁽¹⁾	868,350	5	30
BT58 F5-M3	868,550	5	30
BT58 F5-M4	868,750	5	30
BT58 F5-M5 ⁽¹⁾	868,950	5	30
BT58 F5-M6	869,150	5	30
BT58 F5-M8	869,550	5	30
BT58 F5-M9 a	869,850	5	30
BT58 F3-M1	868,150	3	25
BT58 F3-M2	868,350	3	25
BT58 F3-M3	868,550	3	25
BT58 F3-M4	868,750	3	25
BT58 F3-M5	868,950	3	25
BT58 F3-M6	869,150	3	25
BT58 F3-M8	869,550	3	25
BT58 F3-M9 a	869,850	3	25

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



- XTAL CONTROLLED
- FSK MODULATION
- HIGH POWER (+ 14 dBm)
- FAST DATA RATE (28,8 KB)

DESCRIPTION:

The BT58 F module is designed around the INFINEON TDA5100 PLL, Xtal controlled transmitter IC. The module employs FSK modulation. Together with the precision crystal controlled synthesized architecture, the BT58 F has a 30mW RF output power (25 mW for the 3V version). A high power output allows to employ poor efficiency antennas (loop, helical or a trace on a PCB) to remain under legal 25 mW ERP (5mW ERP on M9a frequency).

BT58 F - PERFORMANCE DATA

		Min	Typ	Max	Units	Notes
▪ FREQUENCY		868		870	MHz	(1)
▪ RF POWER	BT58 F5	25	30		mW	(2)
	BT58 F3	20	25		mW	(2)
▪ IMPEDANCE			50		Ω	
▪ FREQUENCY ACCURACY			± 20	± 30	KHz	(3)
▪ II HARMONIC			-50	-45	dBc	
▪ SPURIOUS EMISSION			-55	-50	dBc	
▪ DATA RATE				28.8	KB	(4)
▪ POWER UP TIME				2	ms	
▪ DEVIATION			± 20		KHz	
▪ SUPPLY VOLTAGE	BT58 F5	4.5	5	5.5	V	
	BT58 F3	2.75	3	3.5	V	
▪ SUPPLY CURRENT			30	35	mA	
▪ OPERATING TEMPERATURE		-20		+60	$^{\circ}\text{C}$	

NOTE

(1) CHANNEL SEPARATION = 200 KHz.
 (2) MAX. LEGAL POWER = 25 mW ERP (SUB BAND F and G) -5mW ERP (SUB BAND K).
 (3) OVER OPERATING TEMPERATURE RANGE.
 (4) 50 / 50 MARK / SPACE DATA PATTERN.

PIN DESCRIPTION		
PIN 2	TXD	DATA INPUT
PIN 3	N.U.	
PIN 4	GND	GROUND
PIN 11	GND	RF GROUND
PIN 13	ANT	RF OUTPUT
PIN 15	VCC	DC SUPPLY

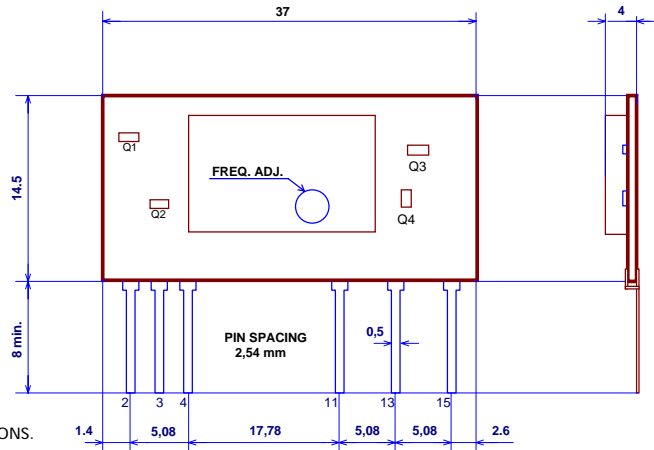


Fig.2 - BT 58 F PHYSICAL DIMENSIONS.

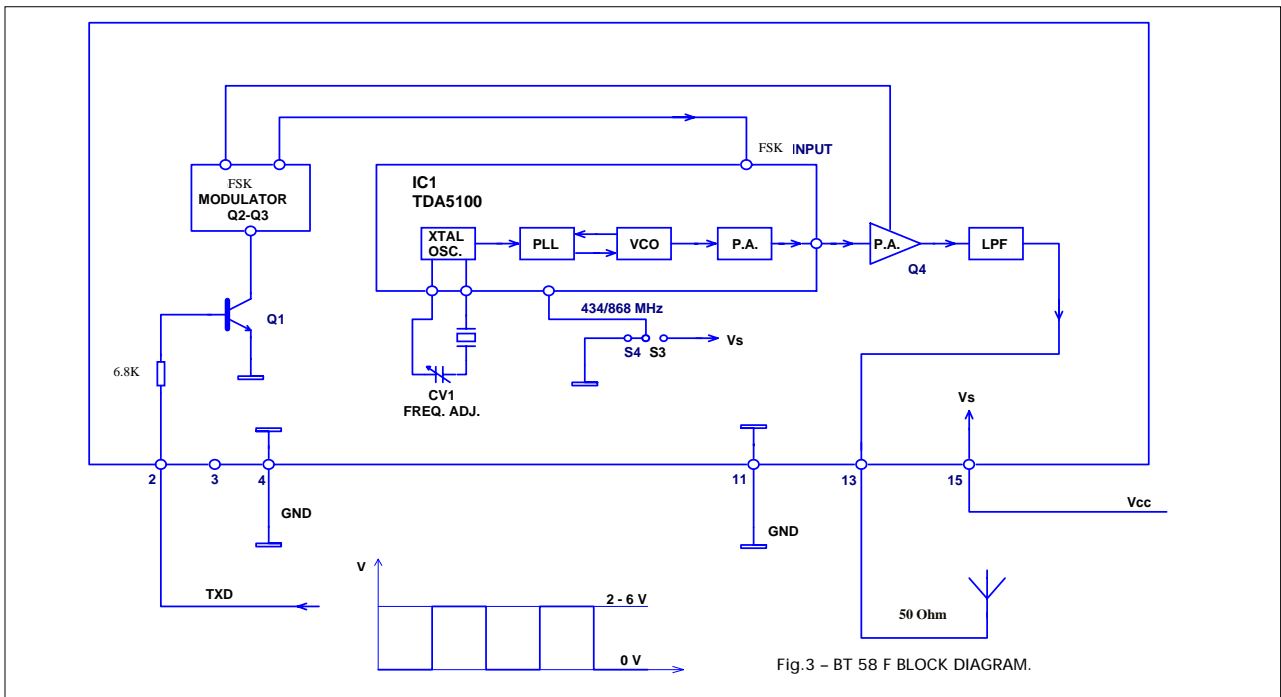


Fig.3 - BT 58 F BLOCK DIAGRAM.

