



Receiver Module : RWS-530 (315/433.92MHz)

***Frequency Range: 315/433.92 MHz**
***Modulate Mode: ASK**
***Circuit Shape: SAW**
***Data Rate: 4800 bps**
***Selectivity: -112dB**
***Channel Spacing: 150 KHz**
***Supply Voltage: 2V~5V**
*** High Sensitivity Passive Design.**
***Simple To Apply with Low External Count.**



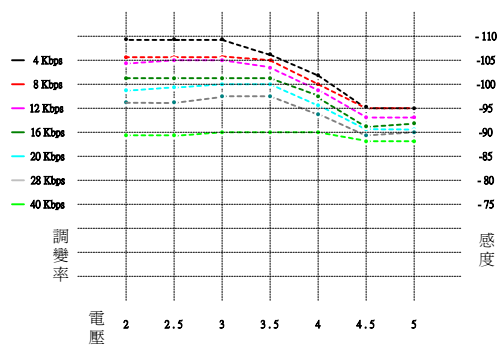
DC Characteristics:

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
Vcc	Operating Supply Voltage	MIN3.5 MAX5.5	2	3	5	
I Tot	Operating Supply Voltage		4.5	-		
V Data	Data Out	1 Data=+200uA (High)	Vcc-0.5		Vcc	V
		1 Data = -10 uA (Low)	-	-	0.3	V

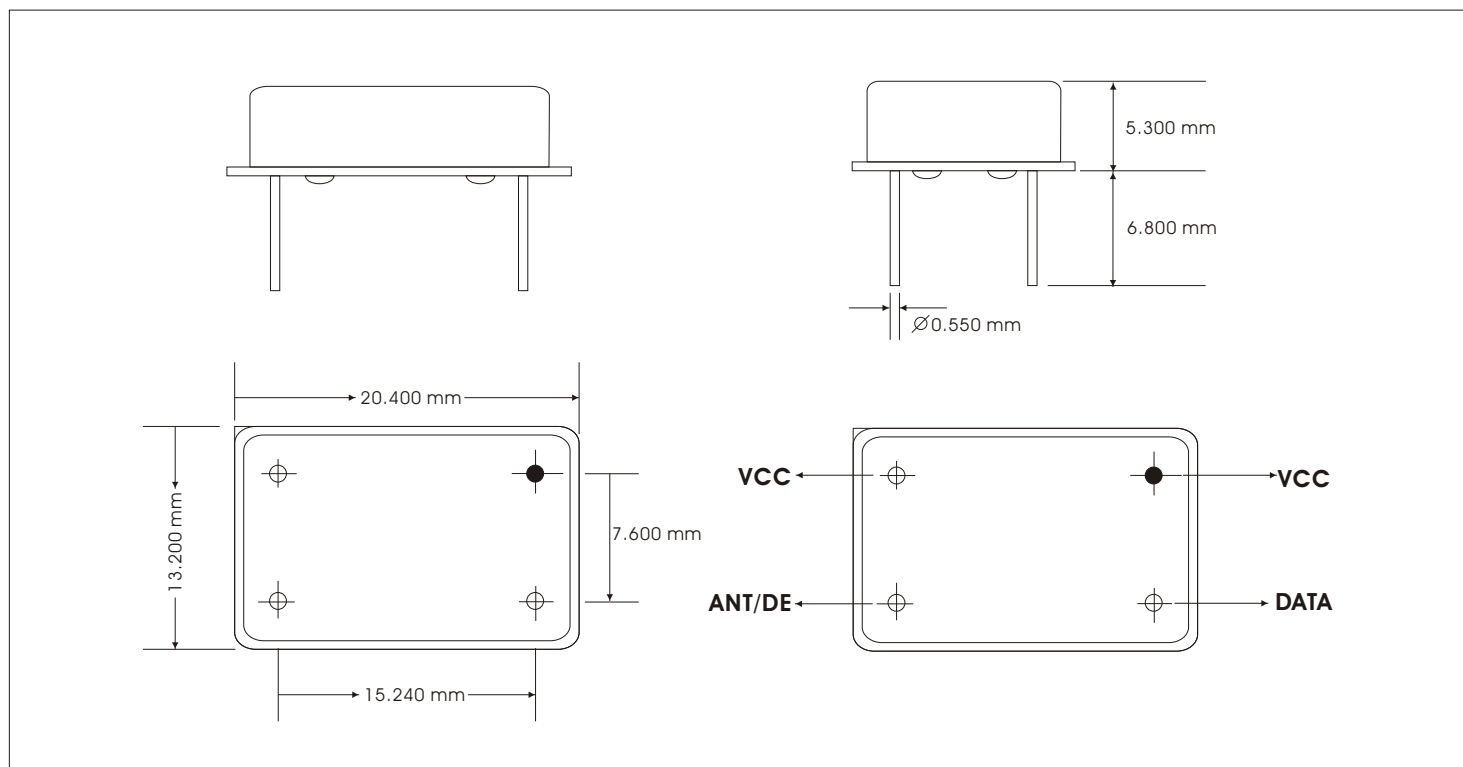
Electrical Characteristics:

Characteristics	Sym.	Min.	Typ.	Max.	Unit
Operationg Radio Frequency	FC	300 - 434			MHz
Sensitivity	Pref			-106	dB
Channel Width		-500		+500	KHz
Noise Equivalent BW	NEB	5		4	KHz
Baseboard Data Rate	BSP			8	Kbps
Receiver Tum On Time				3	ms

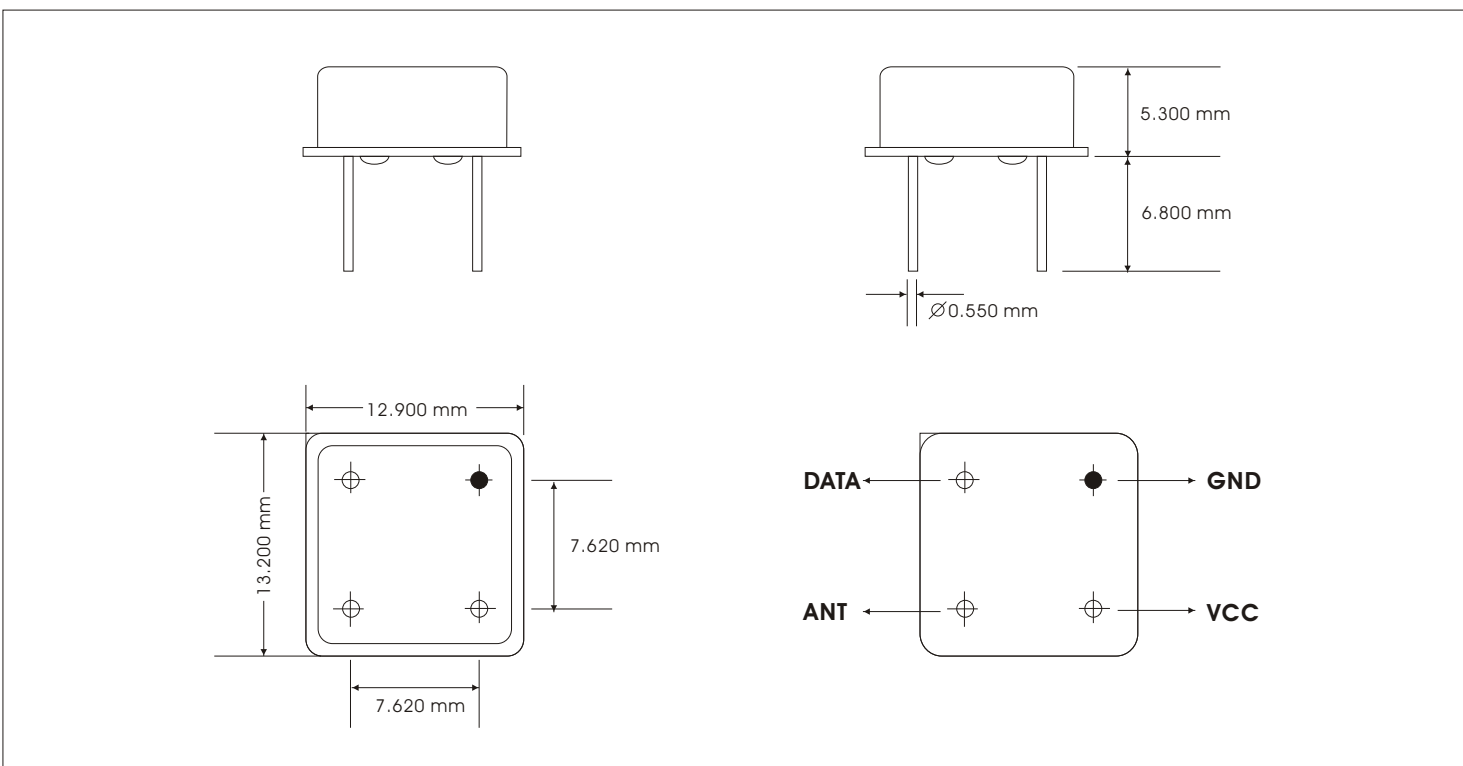
Application Note:



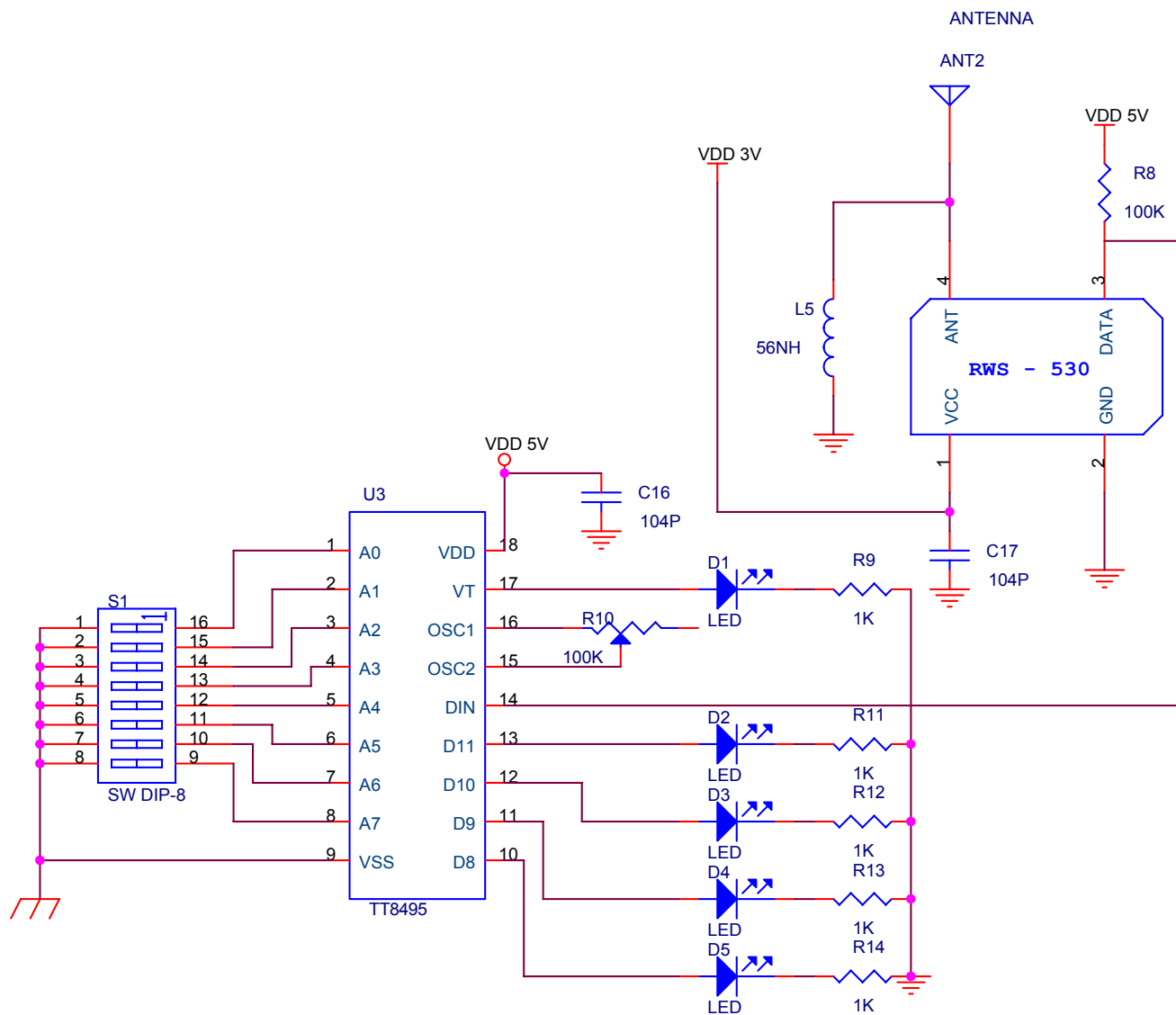
TWS-530



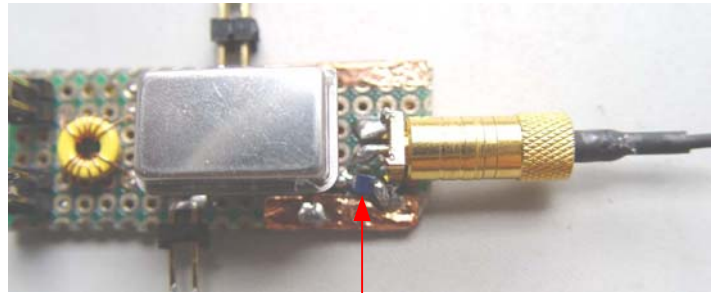
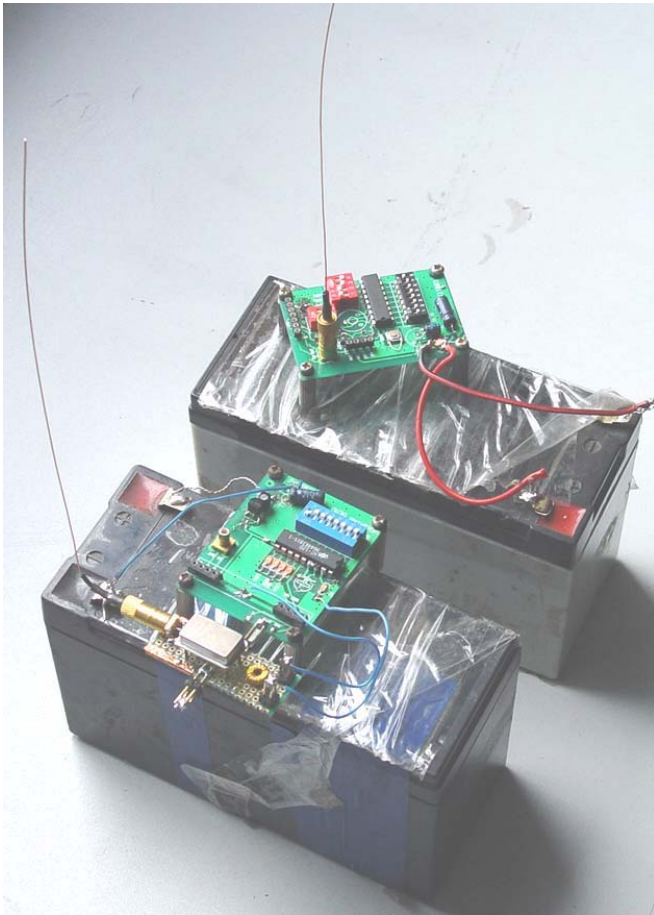
TWS-CS



RWS - 530 示範電路

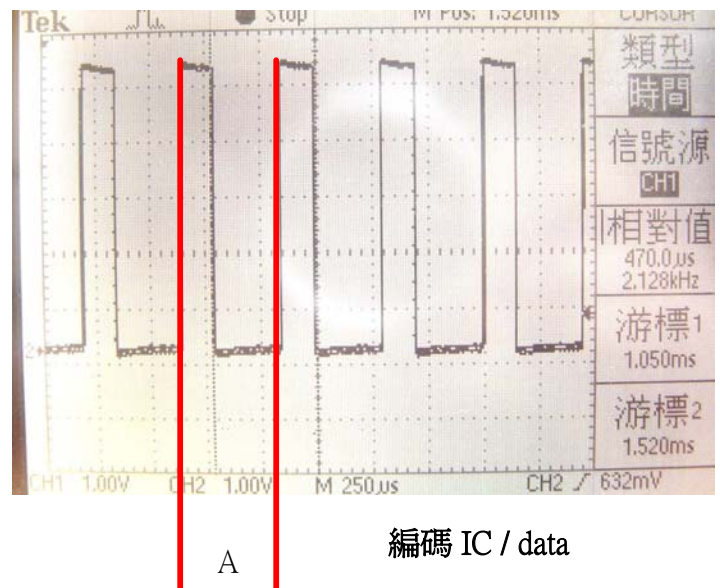


TWS - CS 與 RWS - 530配對測試



接收模組天線輸入端接 56NH電感接地

1. 接收與發射天線長度為 20CM (銅線)
2. 發射電源 DC/5V
3. 接收電源 DC/5V 接收模組電源串220R電阻
使電壓降為 DC/3V



實測有效距離

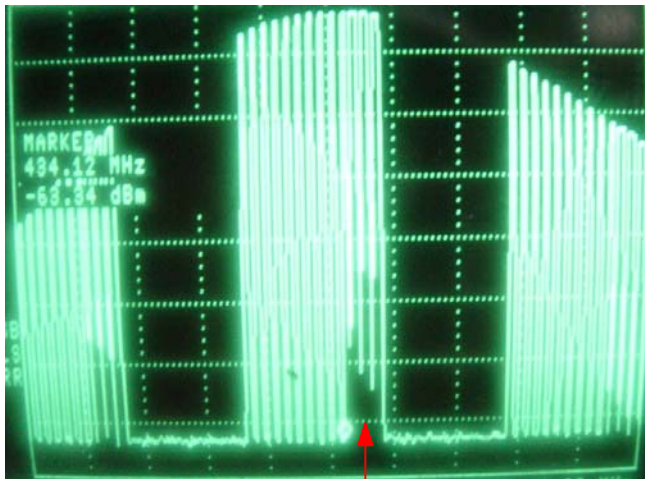
皮尺量出 40公尺距離 = 53步 (腳步)

1. A為 1.25K 距離為 170步 = 128 公尺
2. A為 2.5K 距離為 160步 = 120 公尺

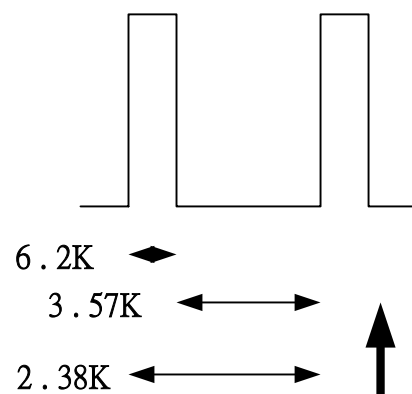
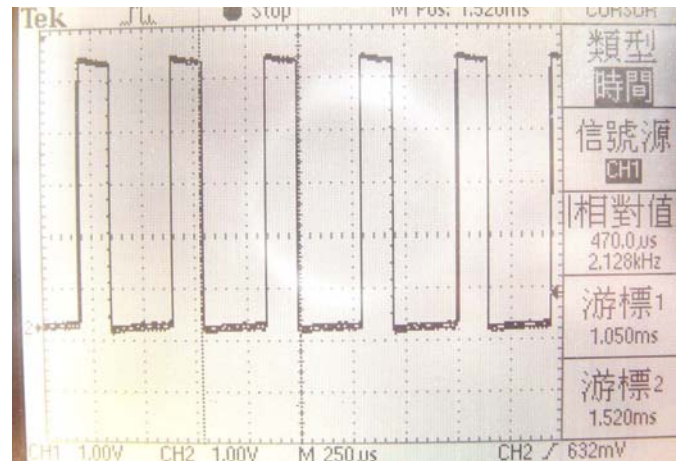
發射與接收部份測試參數

發射參數 - DC / 5V 3.8dB

接收參數 - DC / 3V
外部調制 3K
-105dB



波形沒有拉到底



TWS - CS用KIT制具來做發射調變
當調變資料超過上圖所示
在頻譜可看到此波形
這時接收端收到的資料是不正確的