

1.0 FEATURES

- Wide operating voltage (2 - 12V)
- Low standby current $1\ \mu\text{A}$ typical
- On-chip RC oscillator
- Four time transmission for error checking
- 4,096 combinations encoding capability
- Minimum external components
- Easy interface with RF, Ultrasonic or Infrared transmission media

特點

工作電壓 (2 - 12V)
 靜態電流低, 典型 $1\ \mu\text{A}$
 芯片上置有振盪器
 4 次錯誤檢驗發送
 最多可有 4,096 種編碼能力
 外接零件少
 容易與 RF, 超音波或紅外線
 傳送媒體連接

2.0 ELECTRICAL CHARACTERISTICS 電特性

$V_{DD} = 5\text{V}$, $T_A = 25^\circ\text{C}$ (unless otherwise specified 特別註明除外)

PARAMETER	SYMBOL	LIMITS			UNIT
		MIN	TYP	MAX	
Operating Voltage 工作電壓	V_{DD}	2	5	12	V
Standby Current 靜態電流	I_{SBY}	-	1	10	μA
Operating Current 工作電流	I_{OP}	-	1	-	mA
Source Current 來源電流 ($V_{OH} = 4.5\text{V}$)	I_{OH}	-1	-	-	mA
Sink Current 灌進電流 ($V_{OL} = 0.5\text{V}$)	I_{OL}	1	-	-	mA
Input Current 輸入電流	$I_{IN}(\overline{TE})$	-	-	25	μA

3.0 APPLICATION 應用

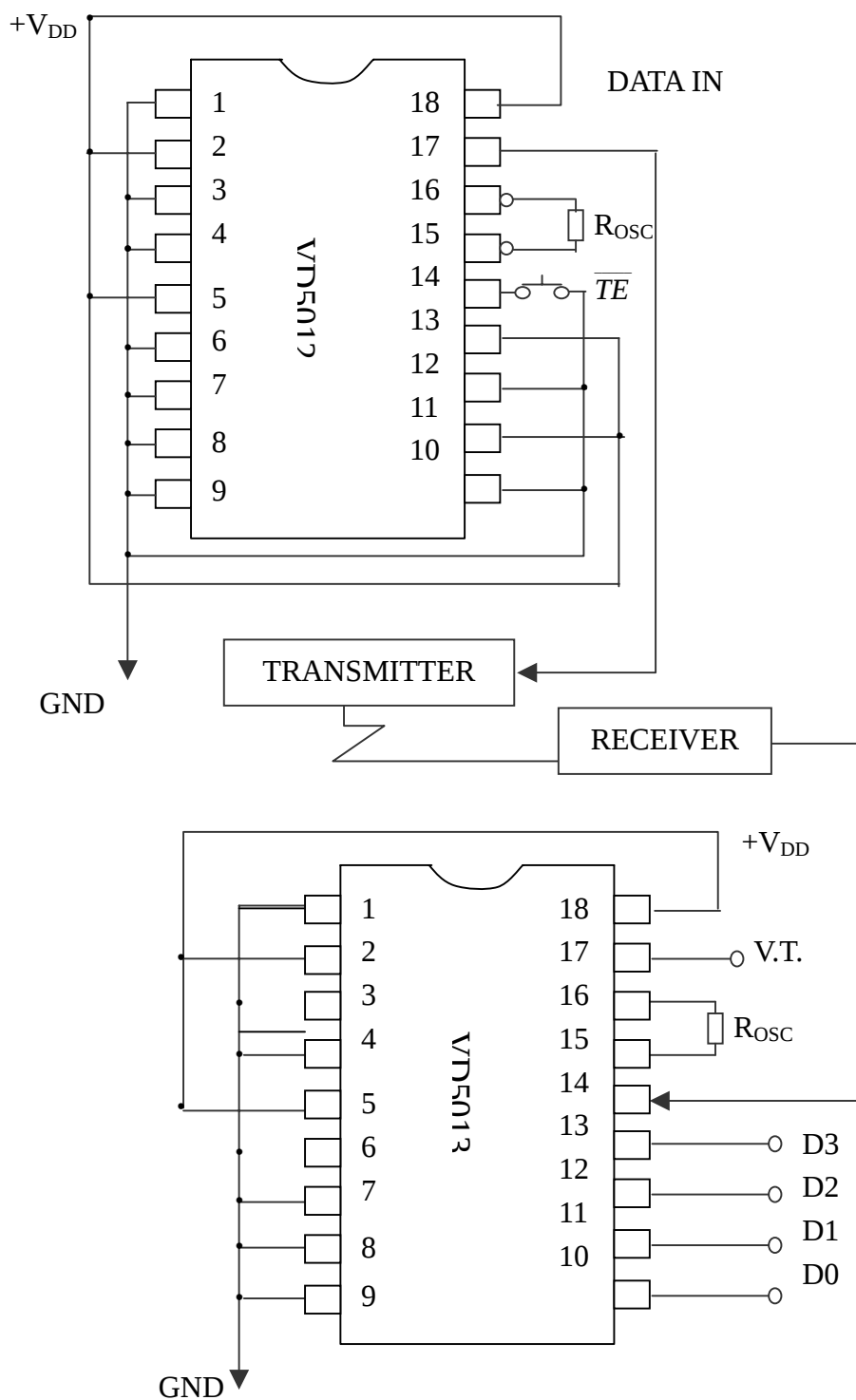
- Security systems 保安系統
- Theft alarm systems 防盜警告系統
- Cordless telephone 無線電話
- Smoke and fire alarm systems 煙火警告系統
- Garage door controller 車房門控制器
- Other remote control systems 其他遙控系統

4.0 APPLICATION INFORMATION 應用資料

$$F_{\text{OSC}}(\text{VD5013}) = 50F_{\text{OSC}}(\text{VD5012})$$

TYP. $R_{OSC}(VD5012) = 3M\Omega$

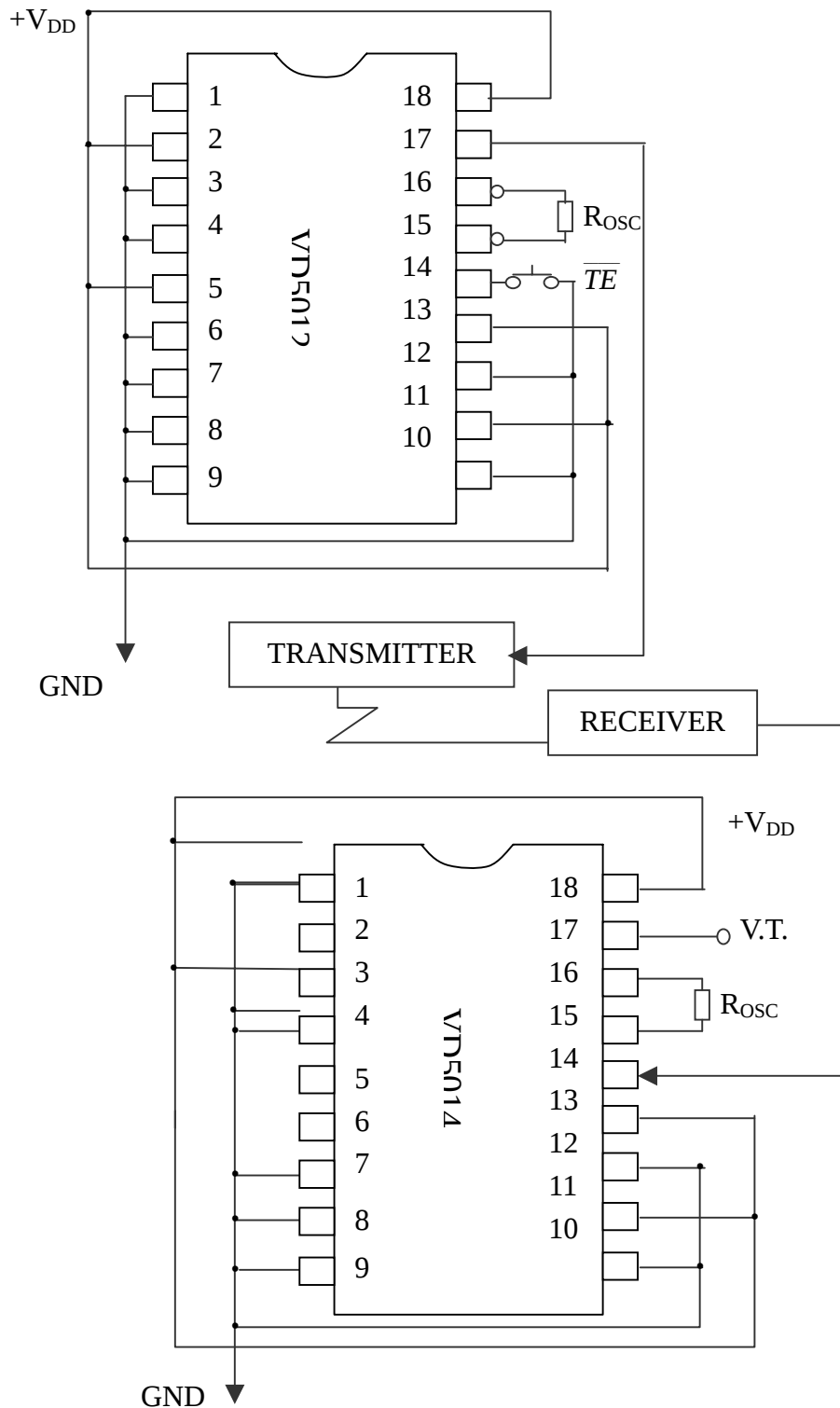
TYP. $R_{OSC}(VD5013) = 230K\Omega$



$$F_{\text{OSC}}(\text{VD5014}) = 50F_{\text{OSC}}(\text{VD5012})$$

$$\text{TYP. } R_{\text{OSC}}(\text{VD5012}) = 3\text{M}\Omega$$

$$\text{TYP. } R_{\text{OSC}}(\text{VD5014}) = 230\text{K}\Omega$$



The IC substrate should be connected to V_{DD} . 芯片襯底請接 V_{DD} 。