Programmable Encoder IC **PT2241**

DESCRIPTION

PT2241 is a tri-state programmable encoder utilizing CMOS Technology specially designed for remote control applications. It encodes address and data codes into a coded waveform suitable for RF modulation and can provide up to 11 Address which may be designed by a one-time programmable process. PT2241 can support up to 4 Data Bits, thereby reducing inventory pressures. It is housed in 8 or 16-pin DIP or SO Package. The pin assignments and application circuit are optimized for easy PCB Layout and cost saving advantage.

FEATURES

• CMOS Technology
• Low Power Consumption
• Least External Components
• High Noise Immunity
• Single Resistor Oscillator
• Operating Voltage: 1.8~15 V
• Up to 4 Data Pins
• Up to 3^{11} Address Codes
• One-Time Programmable Process
• Available in SO or DIP Package
• Reduction of Inventory Pressures

APPLICATIONS

• Burglar Alarm System
• Car Security System
• Car/Garage Door Controller
• Home/Office Security System
• Personal Alarm System

PIN CONFIGURATIONS

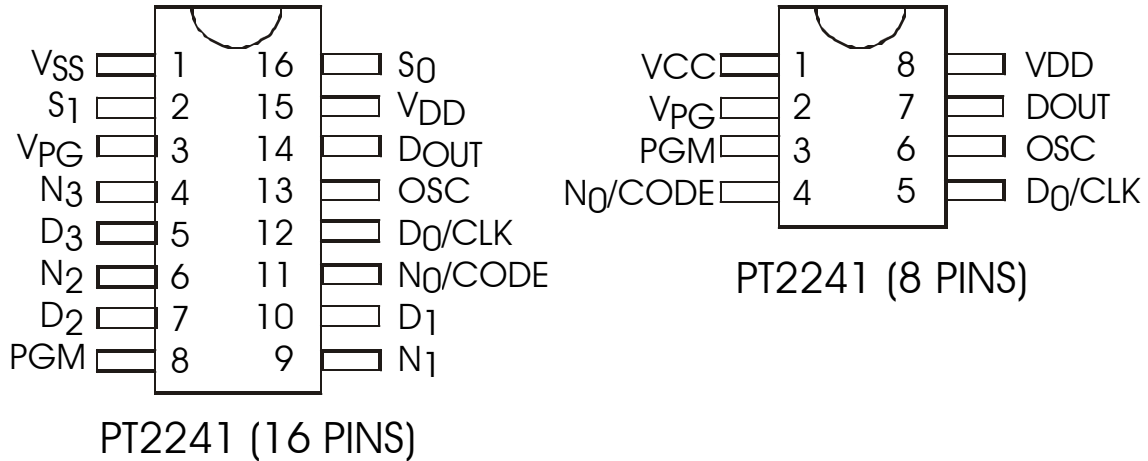| 16 PINS		8 PINS	
V_{SS} — 1	16 — S_0	VCC — 1	8 — VDD
S_1 — 2	15 — V_{DD}	V_{PG} — 2	7 — DOUT
V_{PG} — 3	14 — D_{OUT}	PGM — 3	6 — OSC
N_3 — 4	13 — OSC	N_0/CODE — 4	5 — D_0/CLK
D_3 — 5	12 — D_0/CLK		
N_2 — 6	11 — N_0/CODE		
D_2 — 7	10 — D_1		
PGM — 8	9 — N_1		

PT2241 (16 PINS)

PT2241 (8 PINS)

Figure 2: PT2241 Pin Configurations
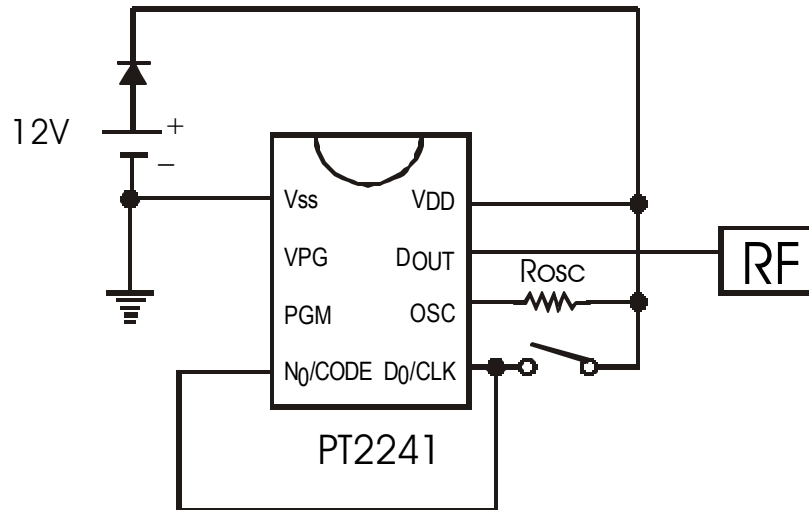
APPLICATION CIRCUITS

Figure 8: PT2241 (8-pin) Application Circuit

Note: In order that IC protection is assured, please make sure that a diode is connected between the battery and the VDD. If the diode is not connected and the battery polarity was inverted, the the IC will fail.
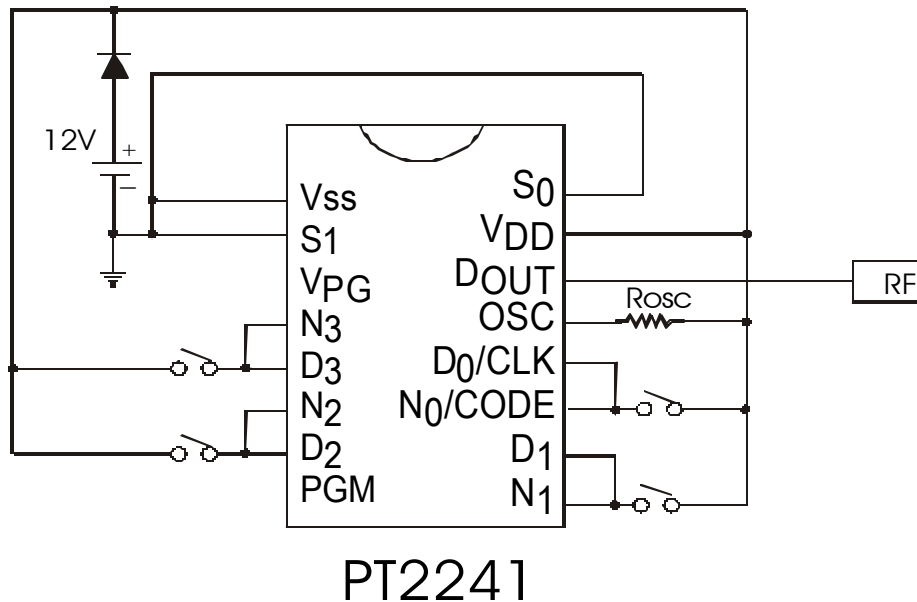

Figure 9: PT2241 (4-data) Application Circuit

Note: In order that IC protection is assured, please make sure that a diode is connected between the battery and the VDD. If the diode is not connected and the battery polarity was inverted, the the IC will fail.

ORDER INFORMATION

Valid Part Number	Package	Address Codes
PT2241	8 Pins, DIP	Programmable
PT2241-S	8 Pins, SOP (150 mil)	Programmable
PT2241P	8 Pins, DIP	Programmed
PT2241P-S	8 Pins, SOP (150 mil)	Programmed
PT2241-16	16 Pins, DIP	Programmable
PT2241-16S	16 Pins, SOP (150 mil)	Programmable
PT2241P-16	16 Pins, DIP	Programmed
PT2241P-16S	16 Pins, SOP (150 mil)	Programmed