



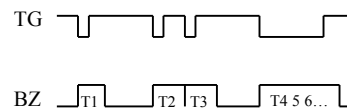
768 NOTES  
1 KEY 24 TUNES

768 音符 24 首歌音樂

|        |  |
|--------|--|
| MELODY |  |
| M948D  |  |

### FEATURES 功能敘述

- Up to 24 tunes.
- 1 sequence trigger key.
- Digital Envelope.



### APPLICATION 產品應用

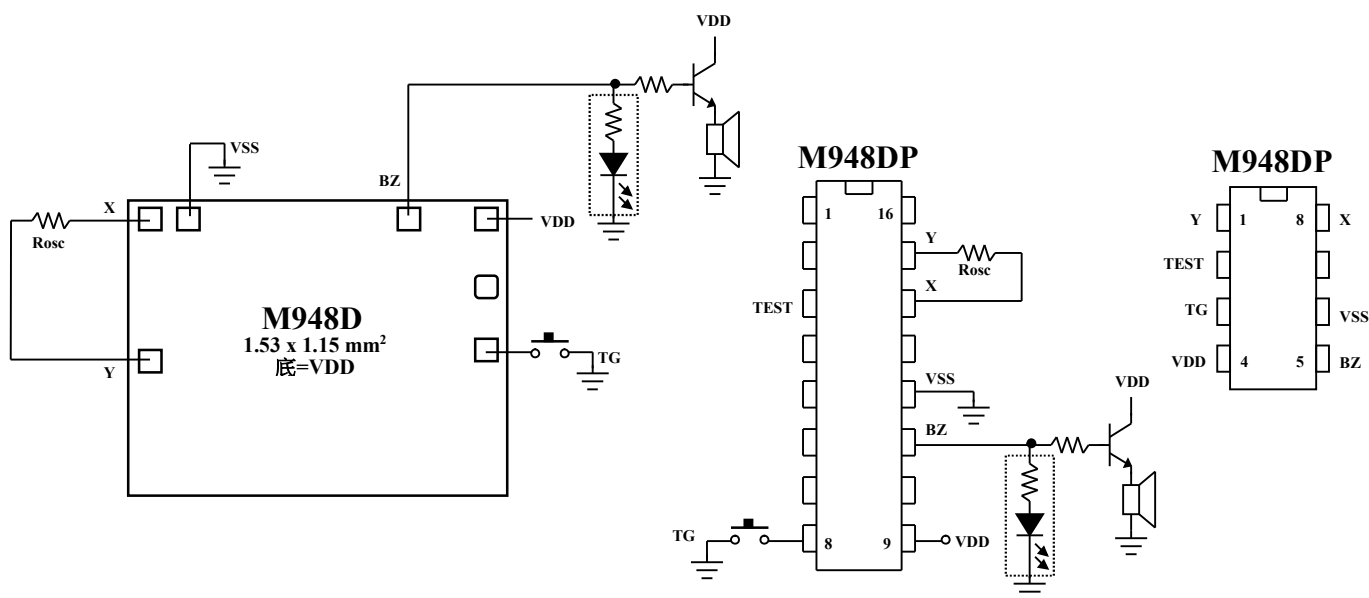
- Toys, Clock melody etc..

### ELECTRICAL CHARACTERISTICS 電氣規格

( @V<sub>DD</sub>=3V unless otherwise specified )

| Characteristics            | Sym.             | Min. | Typ. | Max. | Unit | REMARKS                               |
|----------------------------|------------------|------|------|------|------|---------------------------------------|
| 工作電壓 Operating Voltage     | V <sub>DD</sub>  | 1.5  | 3    | 4.5  | V    |                                       |
| 工作電流 Operating Current     | I <sub>OP</sub>  | —    | 5    | 7    | mA   | No load                               |
| 靜態電流 Quiescent Current     | I <sub>SB</sub>  | —    | 1    | 5    | μA   |                                       |
| 推動電流 BZ Driving Current    | I <sub>O</sub>   | 1    | —    | —    | mA   | @V <sub>DS</sub> =1V                  |
| 振盪頻率 Oscillator Frequency  | F <sub>OSC</sub> | —    | 100  | —    | KHz  | External±30%, R <sub>osc</sub> =220KΩ |
| 工作溫度 Operating Temperature | Temp.            | 0    | 25   | 60   | °C   |                                       |

### APPLICATION DIAGRAM 參考電路圖



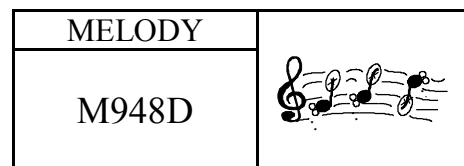
\*All specs and applications shown above subject to change without prior notice.

( 以上電路及規格僅供參考,本公司得逕行修正 )



768 NOTES  
1 KEY 24 TUNES

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**SONG LIST**

**M948D-2 :**

- |                                  |                              |
|----------------------------------|------------------------------|
| 1. AMERICAN PATROL               | 7. ARE YOU SLEEPING          |
| 2. RABBITS                       | 8. HAPPY BIRTHDAY TO YOU     |
| 3. OH! MY DARLING CLEMENTINE     | 9. TOY SYMPHONY              |
| 4. BUTTERFLY                     | 10. HOME SWEET HOME          |
| 5. LONDON BRIDGE IS FALLING DOWN | 11. LULLABY                  |
| 6. ROW, ROW, ROW YOUR BOAT       | 12. SHE WORE A YELLOW RIBBON |

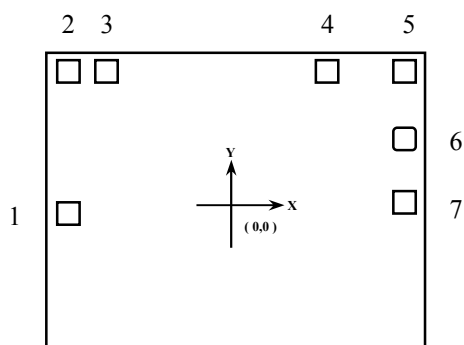
**M948D-3 :**

- |                                |                            |
|--------------------------------|----------------------------|
| 1. TWINKLE TWINKLE LITTLE STAR | 9. CHIM CHIM CHERECE       |
| 2. FORGE IN THE FOREST         | 10. TREE                   |
| 3. TOY SYMPHONY                | 11. CLOCK                  |
| 4. AMERICAN PATROL             | 12. MARY HAD A LITTLE LAMB |
| 5. LONG LONG AGE               | 13. WIEGENLIED             |
| 6. OH! MY DARLING CLEMENTINE   | 14. SUR LE PONT D'AVIGNON  |
| 7. CUCKOO WALTZ                | 15. YANKEE DOODLE          |
| 8. L'EAU VIVE                  | 16. LITTLE BROWN JUG       |

**M948D-1 : MELODY + CLOCK CHIME**

- |                              |            |                       |             |
|------------------------------|------------|-----------------------|-------------|
| 1. LONG LONG AGO             | + 1 chime  | 7. FOR ALICE          | + 7 chimes  |
| 2. A LOVER'S CONCERTO        | + 2 chimes | 8. NEW WORLD          | + 8 chimes  |
| 3. MOONLIGHT ON THE COLORADO | + 3 chimes | 9. OH! SUSANNA        | + 9 chimes  |
| 4. SOUVENIR D'ENFANCE        | + 4 chimes | 10. HOME SWEET HOME   | + 10 chimes |
| 5. A DREAMING OF HOME AND    | + 5 chimes | 11. SANTA LUCIA       | + 11 chimes |
| 6. HAPPY LIFE                | + 6 chimes | 12. LA REINE DEO SABA | + 12 chimes |

**PAD ASSIGNMENT & POSITION**



UNIT : um

| No. | NAME | X      | Y      |
|-----|------|--------|--------|
| 1   | Y    | -650   | -89.75 |
| 2   | X    | -650   | 462.50 |
| 3   | VSS  | -500   | 462.50 |
| 4   | BZ   | 347.50 | 462.50 |
| 5   | VDD  | 649    | 462.50 |
| 6   | TEST | 649    | 193.75 |
| 7   | TG   | 649    | -55.75 |

\* CHIP SIZE ~ 1.53 x 1.15 mm<sup>2</sup>.

\* IC substrate should be connected to VDD in PCB (PCB 上 IC 必須接 VDD)

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