




Technical Data of Ceramic Resonator

MURATA Part No.: CSTCE16M0V53-R0

Applied to HD64F38104H

***TOYAMA MURATA MANUFACTURING CO., LTD.***

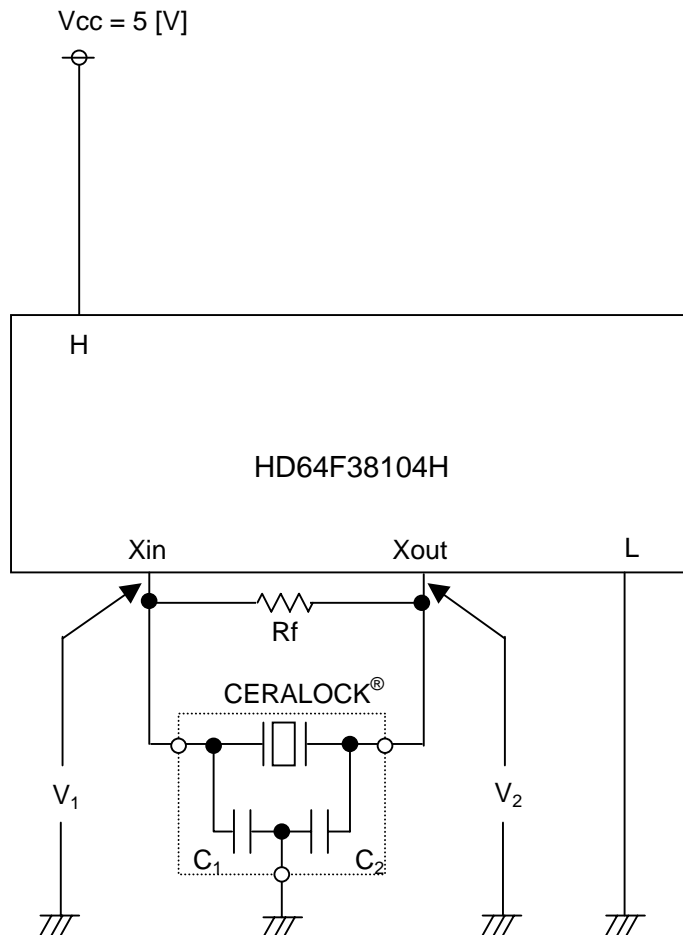
Product Engineering Service Section VI  
Piezoelectric Planning & Market Promotion Department II  
Piezoelectric Components Division  
Device Business Unit

| Approved by   | Checked by   | Issued by   | Issued Date | Data No.    |
|---|--|---|-------------|-------------|
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## Test Circuit



Xin : 10  
 Xout: 9  
 H : 1,4,52  
 L : 8,53

## Recommended Value

CERALOCK<sup>®</sup> : CSTCE16M0V53-R0

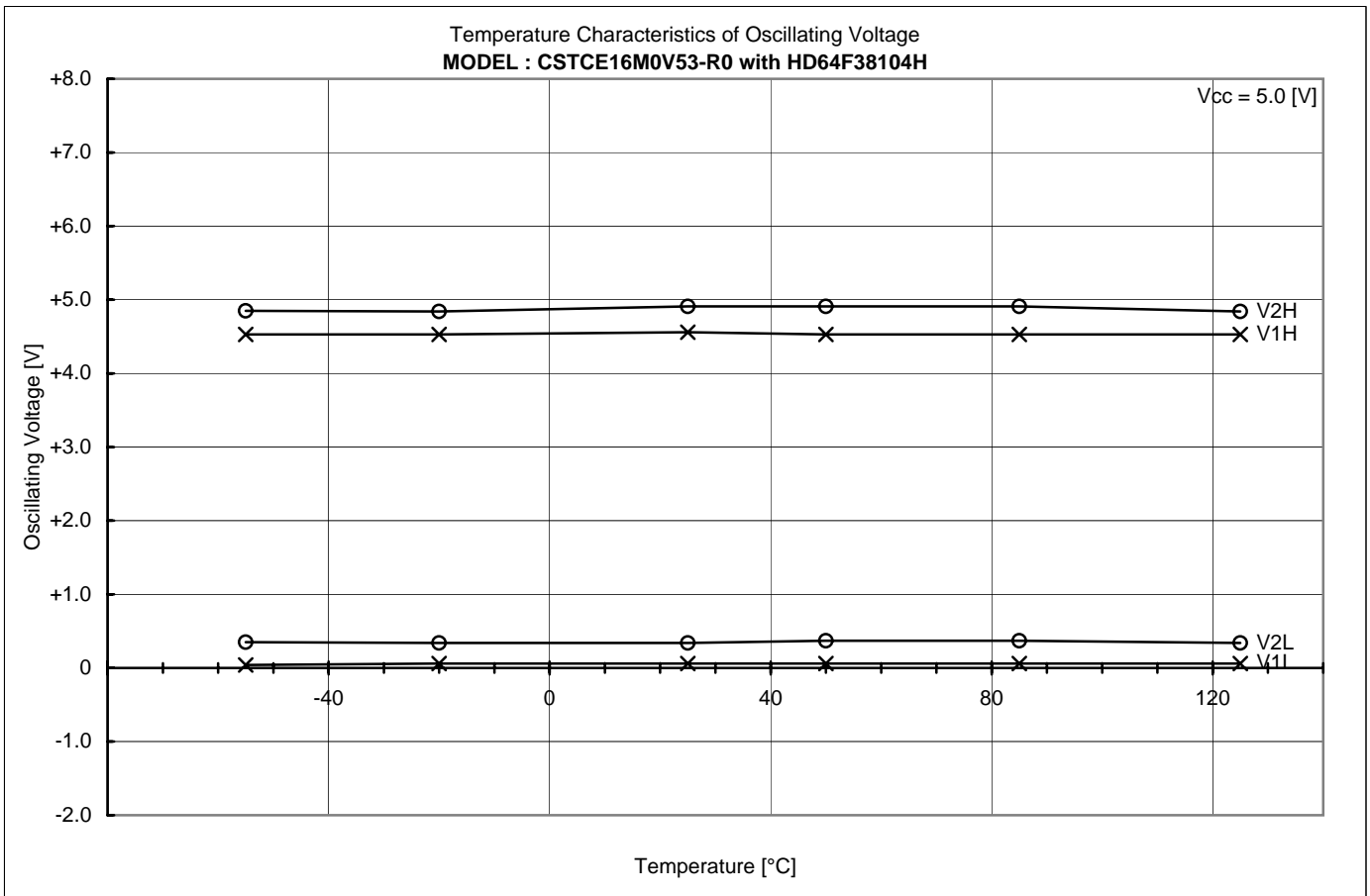
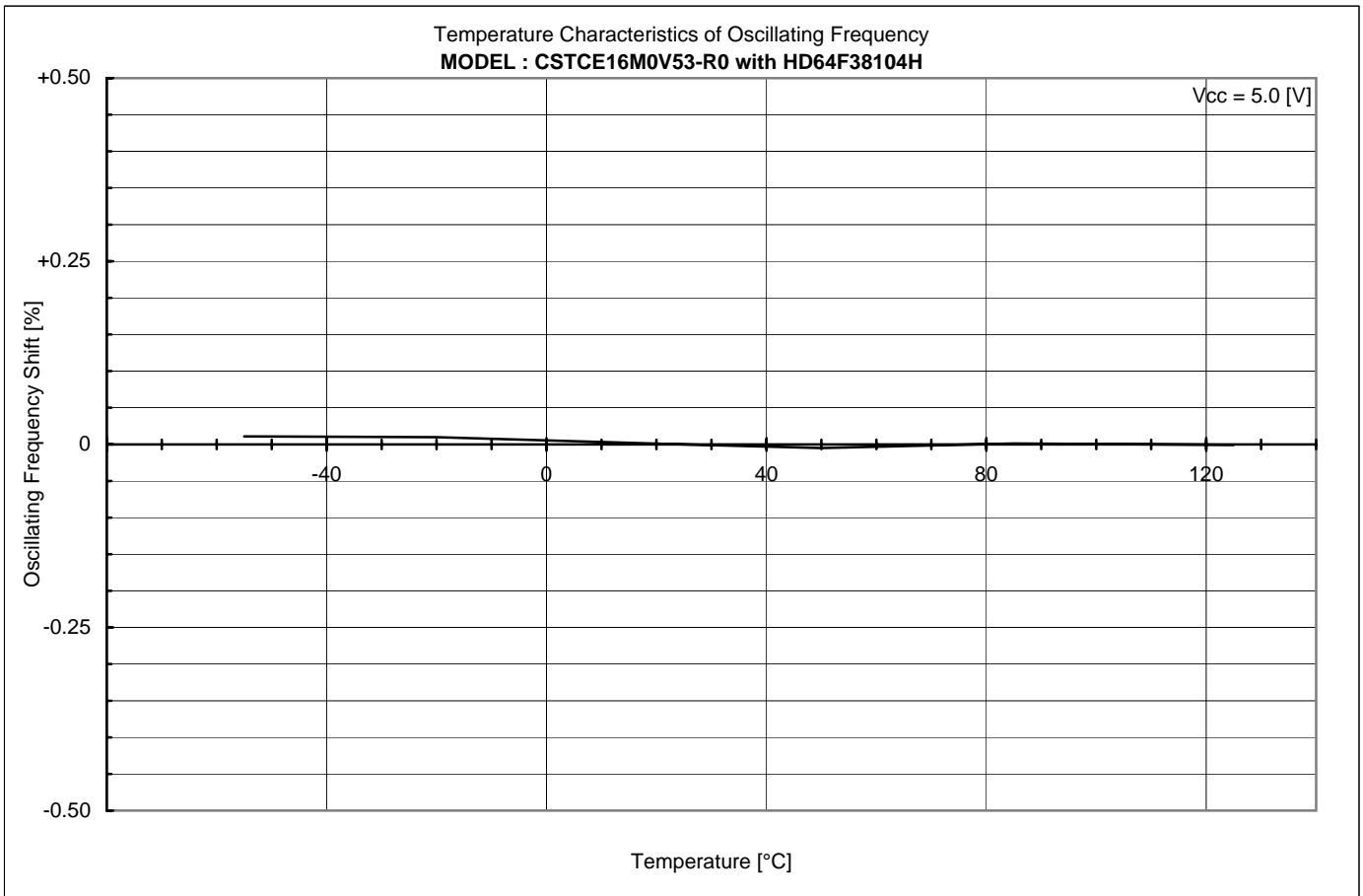
Vcc = 2.7 to 5.5 [V]

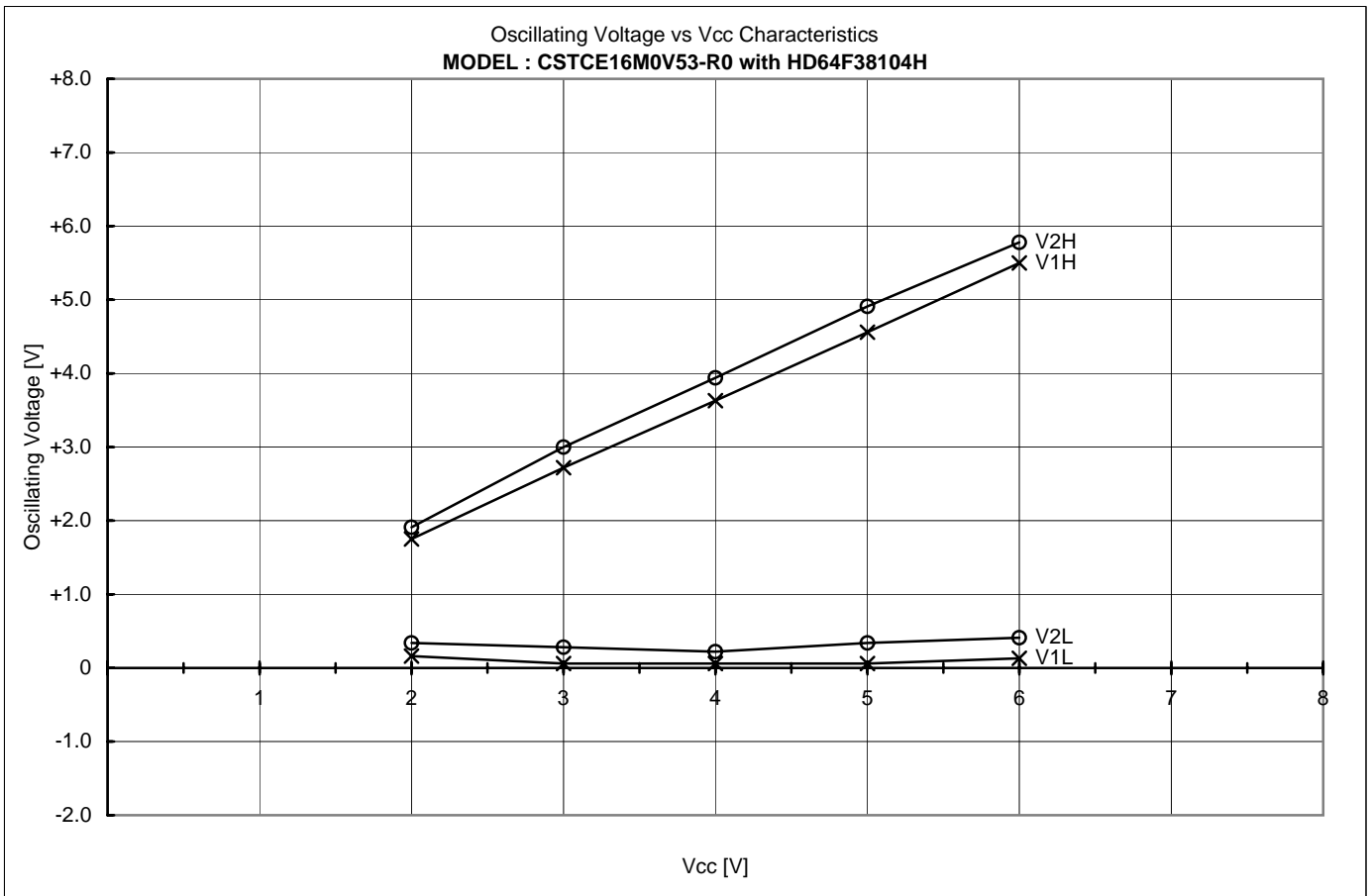
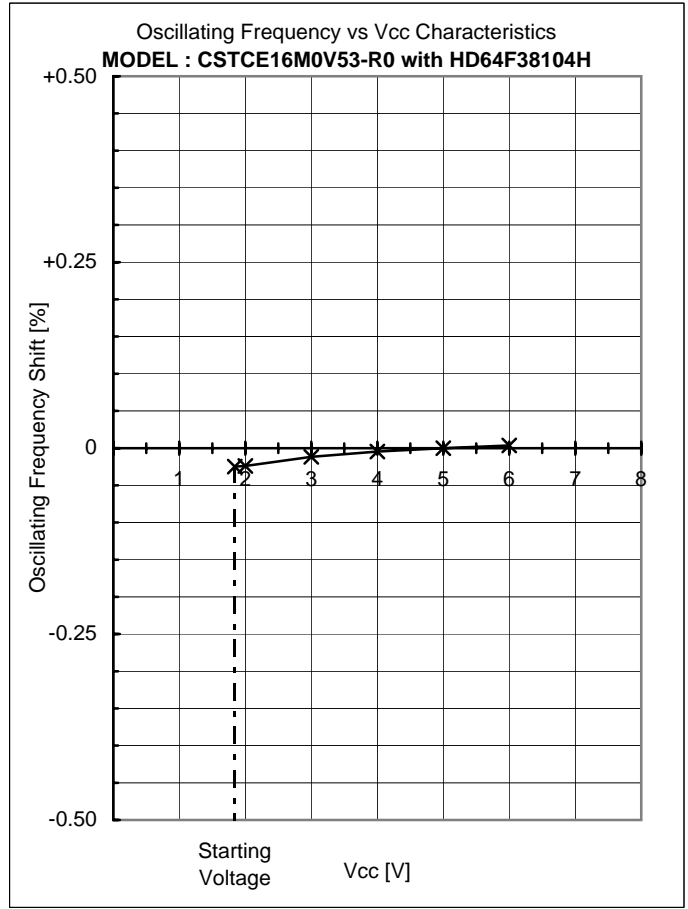
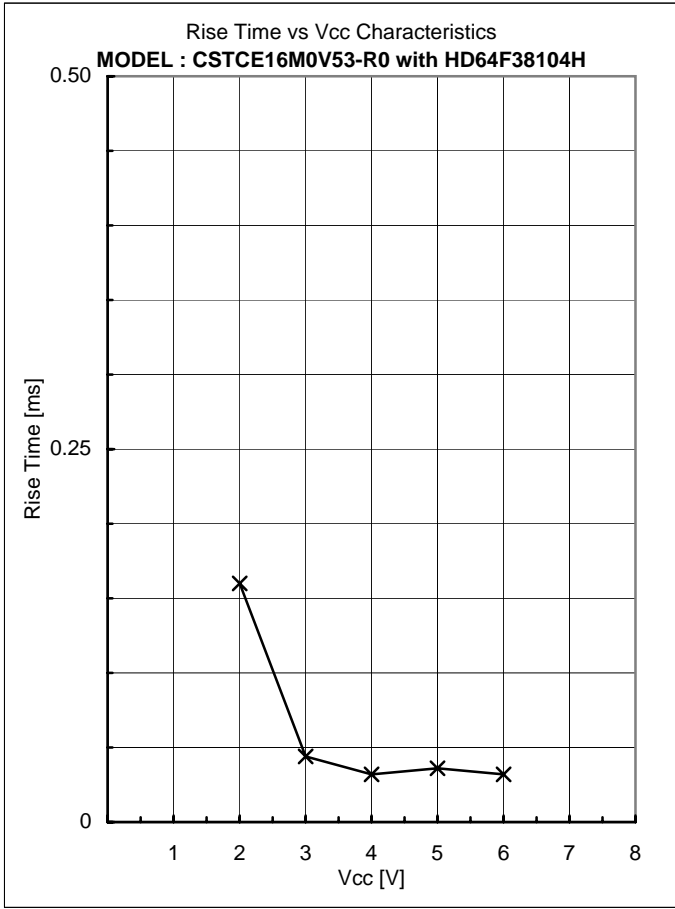
C1 = 15 [pF] (Typ.)

C2 = 15 [pF] (Typ.)

Rf = 1 [Mohm]

Ta = -40 to 85 [°C]







## Appendixes

### 4. Comparison Table

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### Comparison Table

| IC : No | V1H [V] | V1L [V] | V1p-p [V] | V2H [V] | V2L [V] | V2p-p [V] | Fosc [kHz] | Trise [ms] | Vstart [V] |
|---------|---------|---------|-----------|---------|---------|-----------|------------|------------|------------|
| なし      | 4.56    | 0.06    | 4.50      | 4.91    | 0.34    | 4.57      | 15991.684  | 0.036      | 1.84       |
| N高P低    | 4.69    | 0.06    | 4.63      | 4.91    | 0.41    | 4.50      | 15992.261  | 0.041      | 1.80       |
| N低P高    | 4.56    | -0.07   | 4.63      | 4.84    | 0.28    | 4.56      | 15992.043  | 0.037      | 1.89       |
| SG太太    | 4.06    | 0.02    | 4.04      | 4.41    | 0.34    | 4.07      | 15991.398  | 0.040      | 1.91       |
| SG細細    | 4.56    | -0.01   | 4.57      | 4.78    | 0.34    | 4.44      | 15992.119  | 0.038      | 1.89       |

Ref.

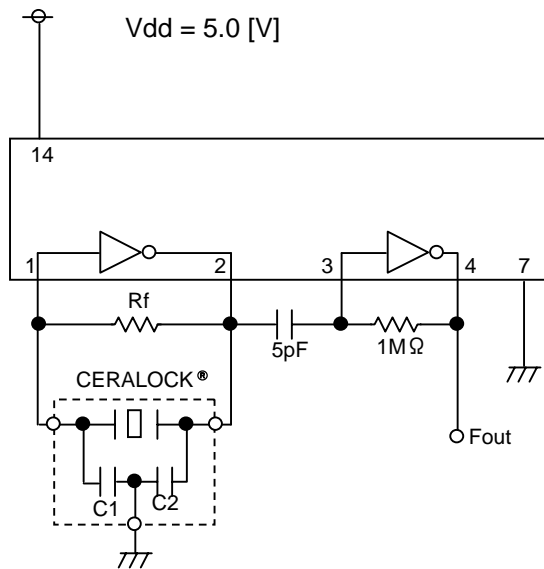
Performance described page 2 to 3 were measured with IC No. なし



### Frequency Correlation Data

| Sample No. | HD64F38104H<br>Fosc [kHz] | TC74HCU04AP<br>Fosc [kHz] | Shift [%] |
|------------|---------------------------|---------------------------|-----------|
| 1          | 15991.868                 | 15977.300                 | 0.0912    |
| 2          | 15980.951                 | 15973.200                 | 0.0485    |
| 3          | 15979.908                 | 15967.500                 | 0.0777    |
| 4          | 15989.693                 | 15977.800                 | 0.0744    |
| 5          | 15993.326                 | 15984.600                 | 0.0546    |
| $\bar{X}$  | 15987.149                 | 15976.080                 | 0.0693    |

#### muRata Standard Circuit



CERALOCK® : CSTCE16M0V53-R0

C1 = 15 [pF]

C2 = 15 [pF]

Rf = 1 [Mohm]