

Technical Data of Ceramic Resonator

MURATA Part No.: CSTCE12M0G52-R0

Applied to HD6437048

Note: Suffix indicates packaging style.

·Lead type

-A0 : Flat pack package(Ho=18mm)

-B0 : Bulk

·SMD type

-R0 : Plastic tape package( $\varnothing$ =180mm)





-B0 : Bulk

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

Product Engineering Service Section I

Planning Department

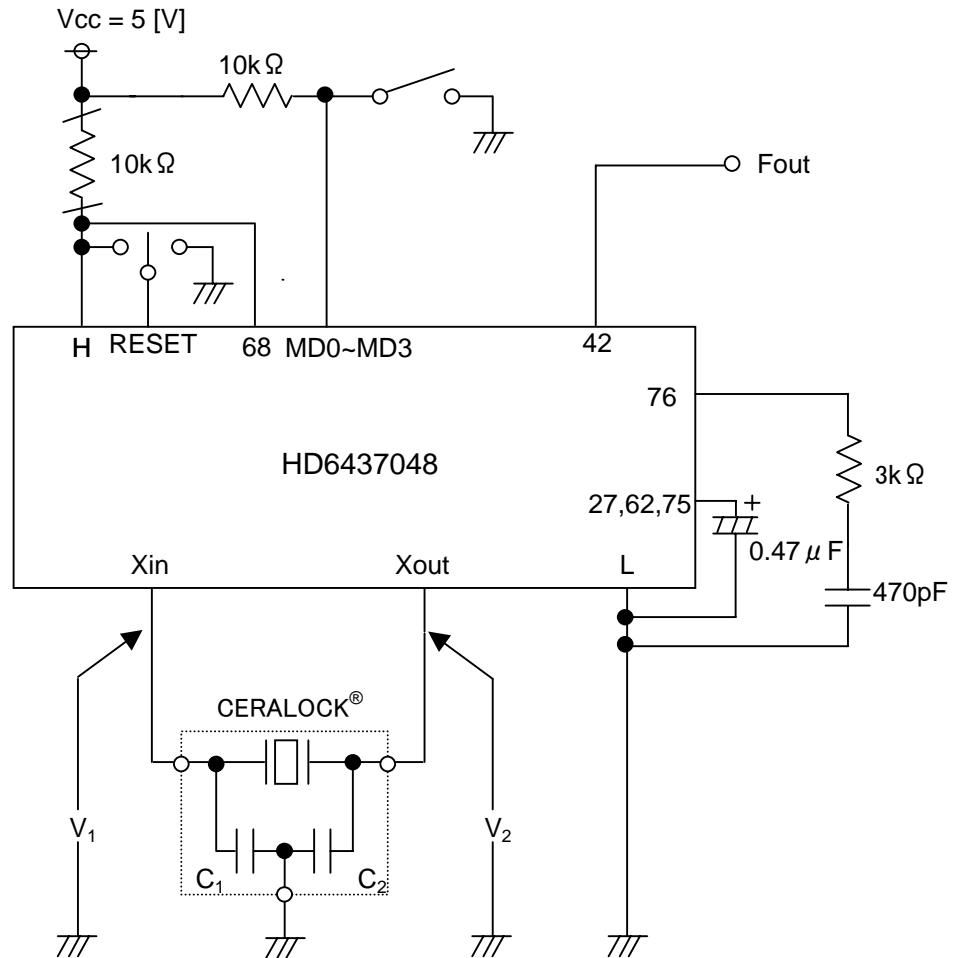
Piezoelectric Components Group

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## Test Circuit



RESET : 67(H)

MD0 : 72(H)

MD1 : 71(H)

MD2 : 70(H)

MD3 : 69(L)

Xin : 73

Xout: 74

H : 11,27,38,43,65,66

L : 9,24~26,28~37,39~41,64,77

## Recommended Value

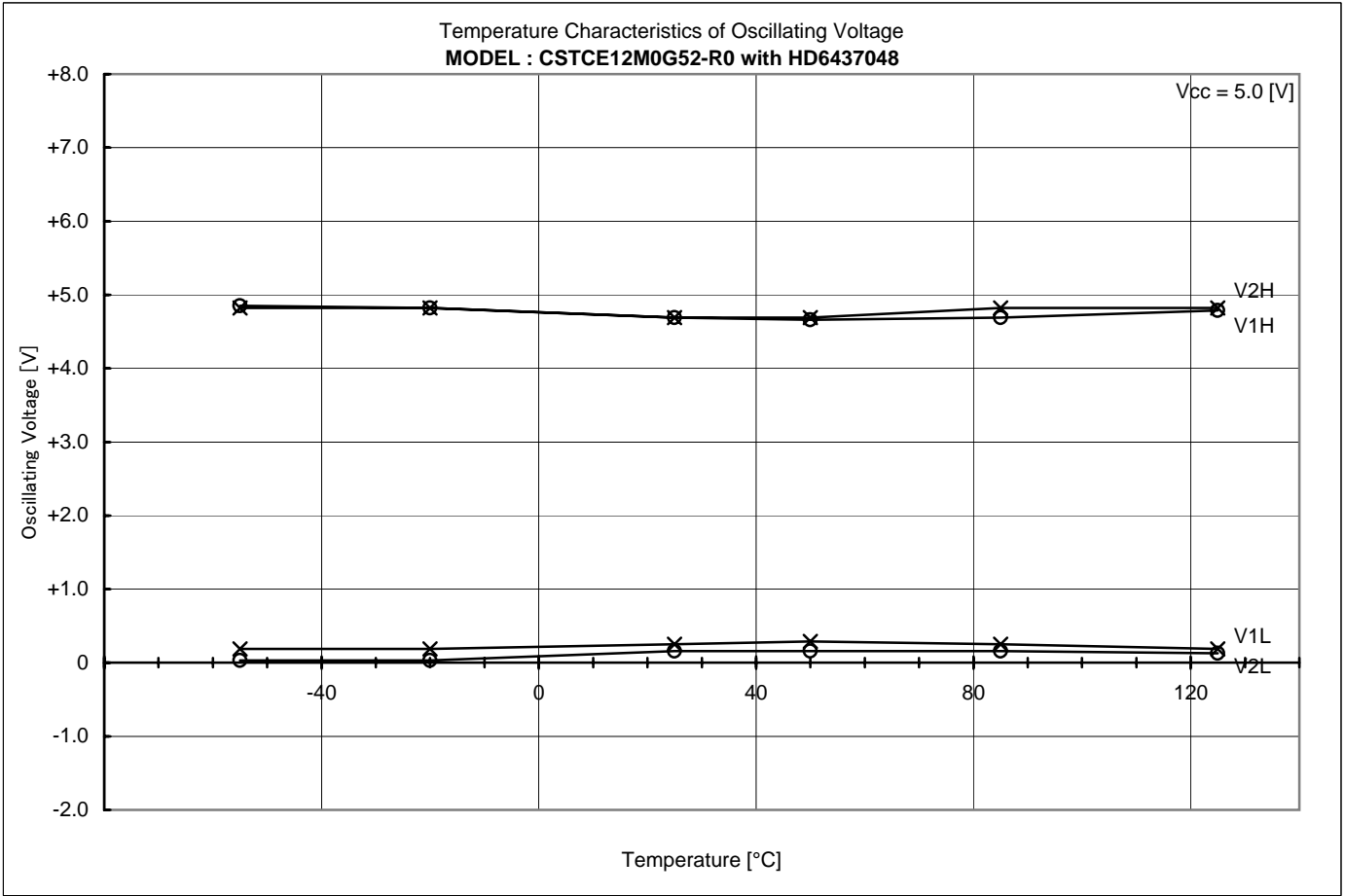
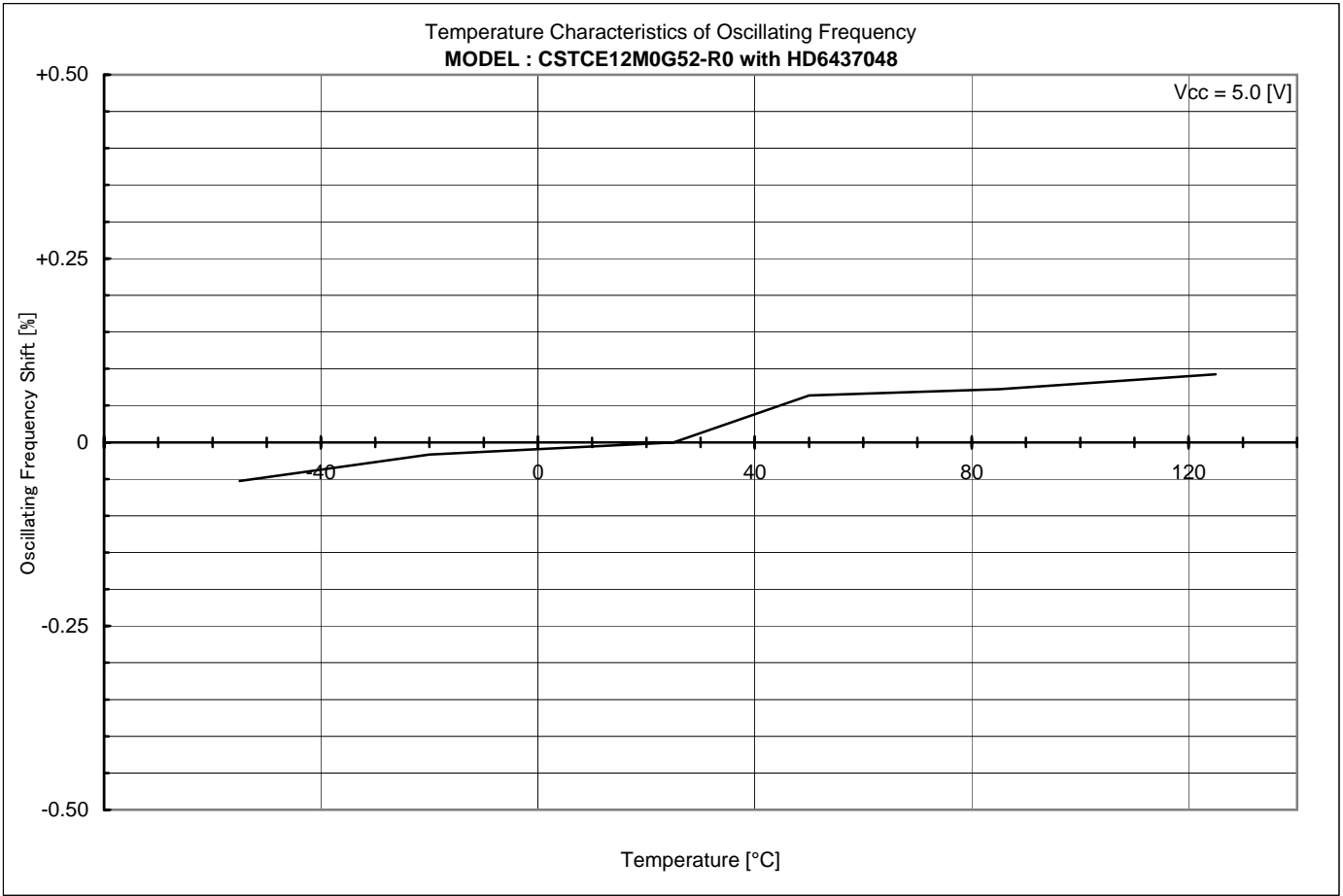
CERALOCK<sup>®</sup> : CSTCE12M0G52-R0

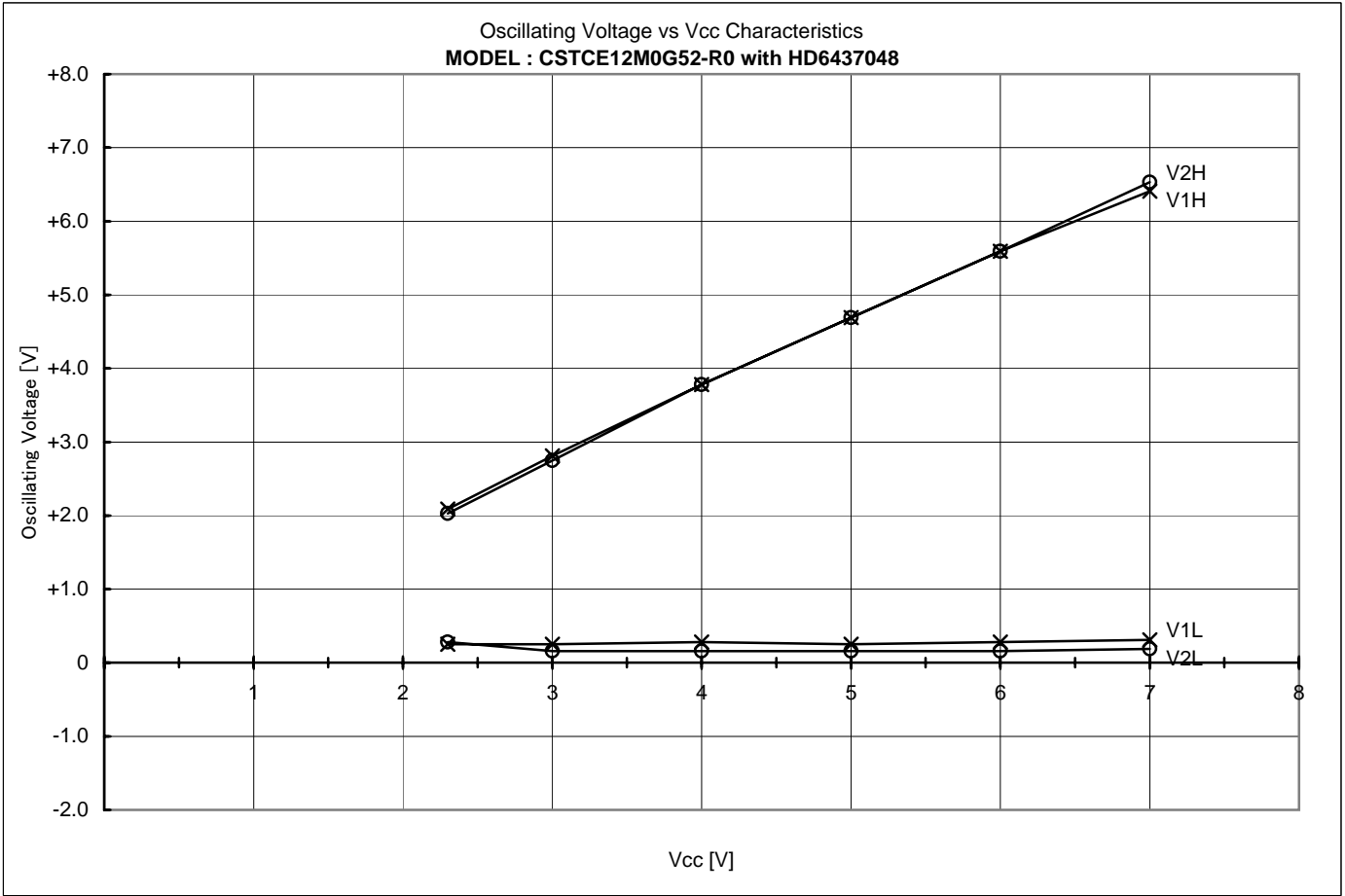
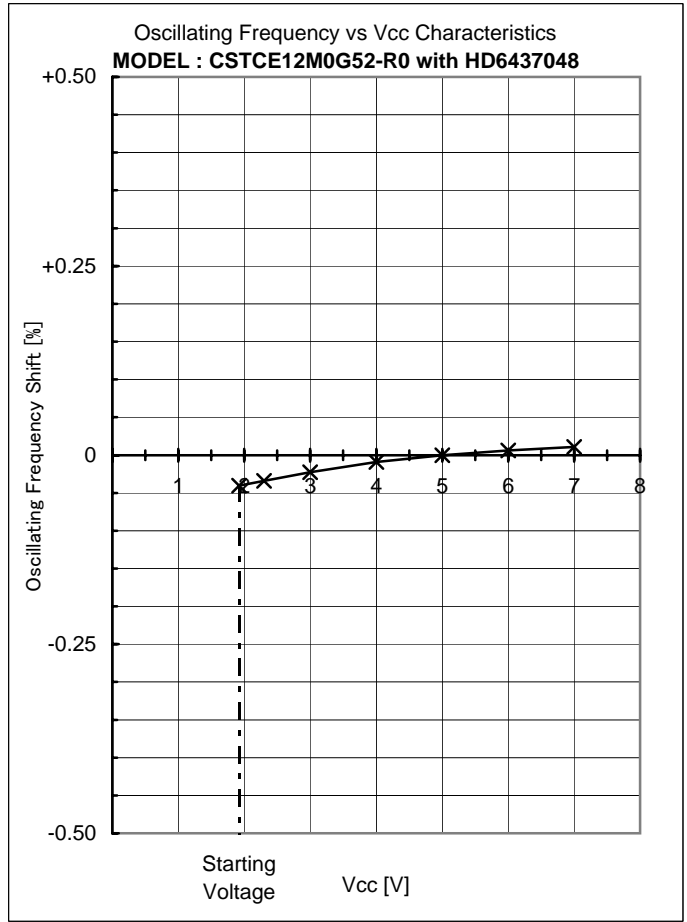
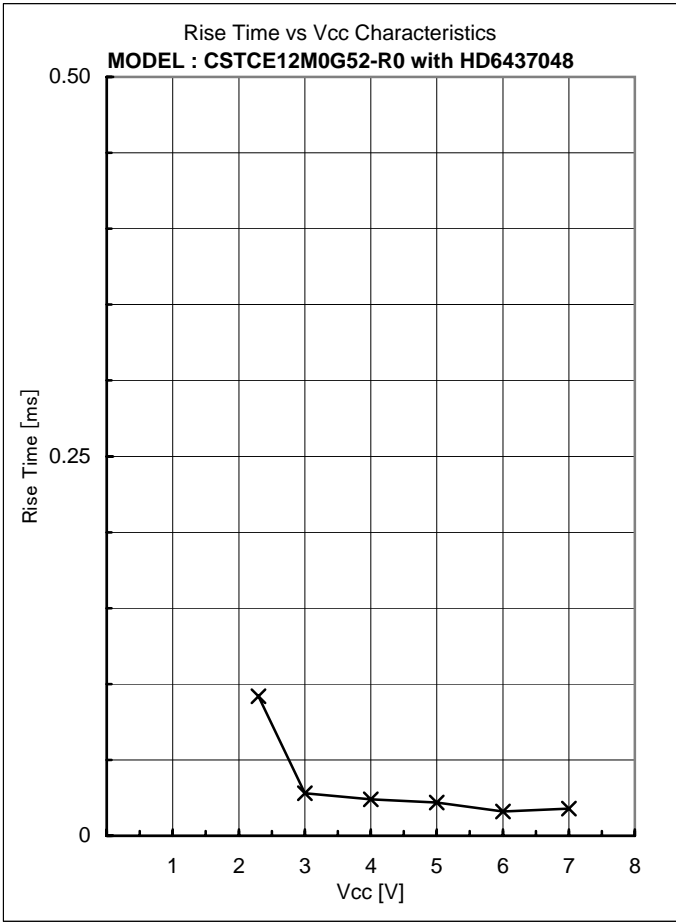
Vcc = 4.0 to 5.5 [V]

C1 = 10 [pF] (Typ.)

C2 = 10 [pF] (Typ.)

Ta = -40 to 85 [°C]







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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]
019	4.69	0.28	4.41	4.69	0.16	4.53	11980.246	0.028	1.93
030	4.69	0.25	4.44	4.69	0.16	4.53	11980.821	0.026	1.91
167	4.69	0.25	4.44	4.69	0.16	4.53	11980.819	0.025	1.94

Ref.

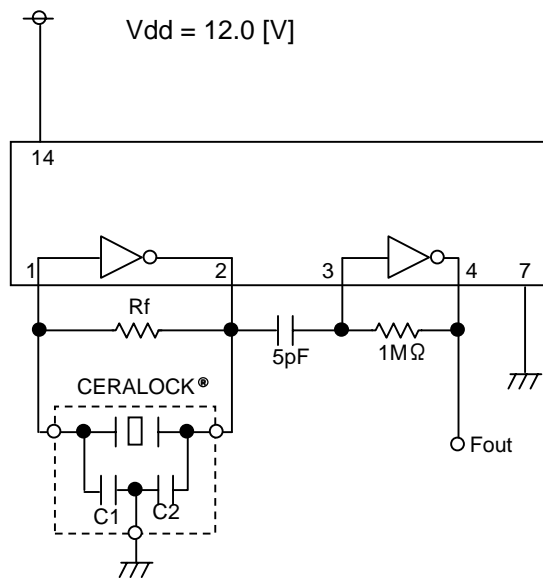
Performance described page 2 to 3 were measured with IC No. 167



### Frequency Correlation Data

Sample No.	HD6437048 Fosc [kHz]	TC4069UBP Fosc [kHz]	Shift [%]
1	11981.930	11993.800	-0.0990
2	11958.545	11967.800	-0.0773
3	11963.782	11975.100	-0.0945
4	11953.300	11964.600	-0.0944
5	11962.629	11973.300	-0.0891
-			
X	11964.037	11974.920	-0.0909

### muRata Standard Circuit



CERALOCK® : CSTCE12M0G52-R0

C1 = 10 [pF]

C2 = 10 [pF]

Rf = 1 [Mohm]