Technical Data of Ceramic Resonator

MURATA Part No.: CSTLS16M0X51-B0

Applied to M30622SAFP

Note: Suffix indicates packaging style.

·Lead type
- -A0 : Flat pack package(Ho=18mm)
- -B0 : Bulk

·SMD type
- -R0 : Plastic tape package(∅=180mm)
- -B0 : Bulk

TOYAMA MURATA MANUFACTURING CO., LTD.

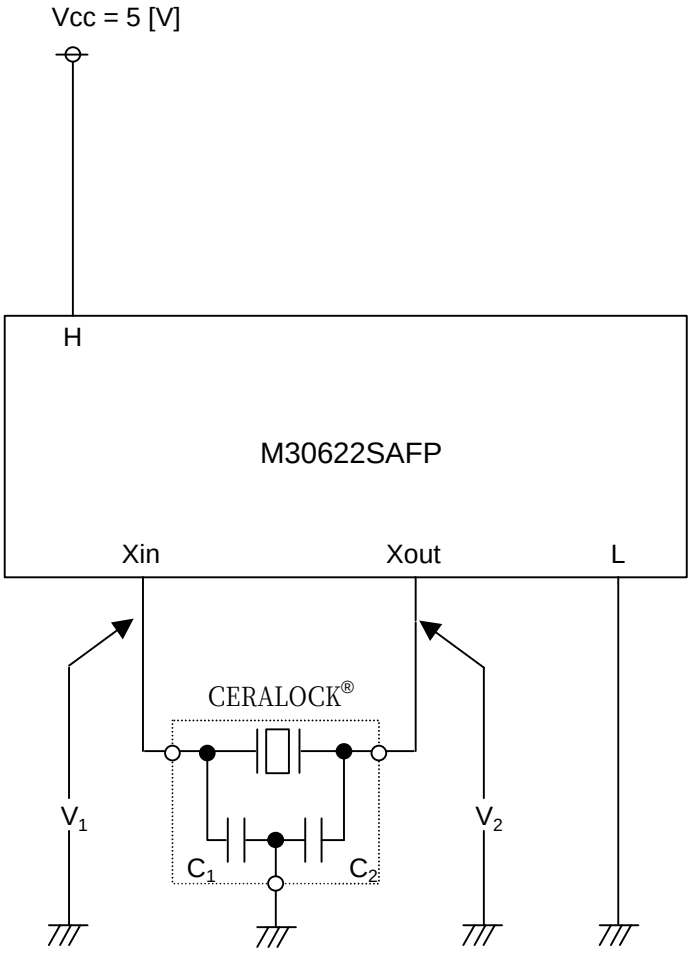
Product Engineering Service Section I
Planning Department
Piezoelectric Components Group

Approved by	Checked by	Checked by	Issued by	Issued Date	Data No.
K.Terada	K.Maruno	K.Masaki	K.Tagata	Sep 17, 2001	TCD-01-1545

Murata Manufacturing Co., Ltd.

Contents

Test Circuit

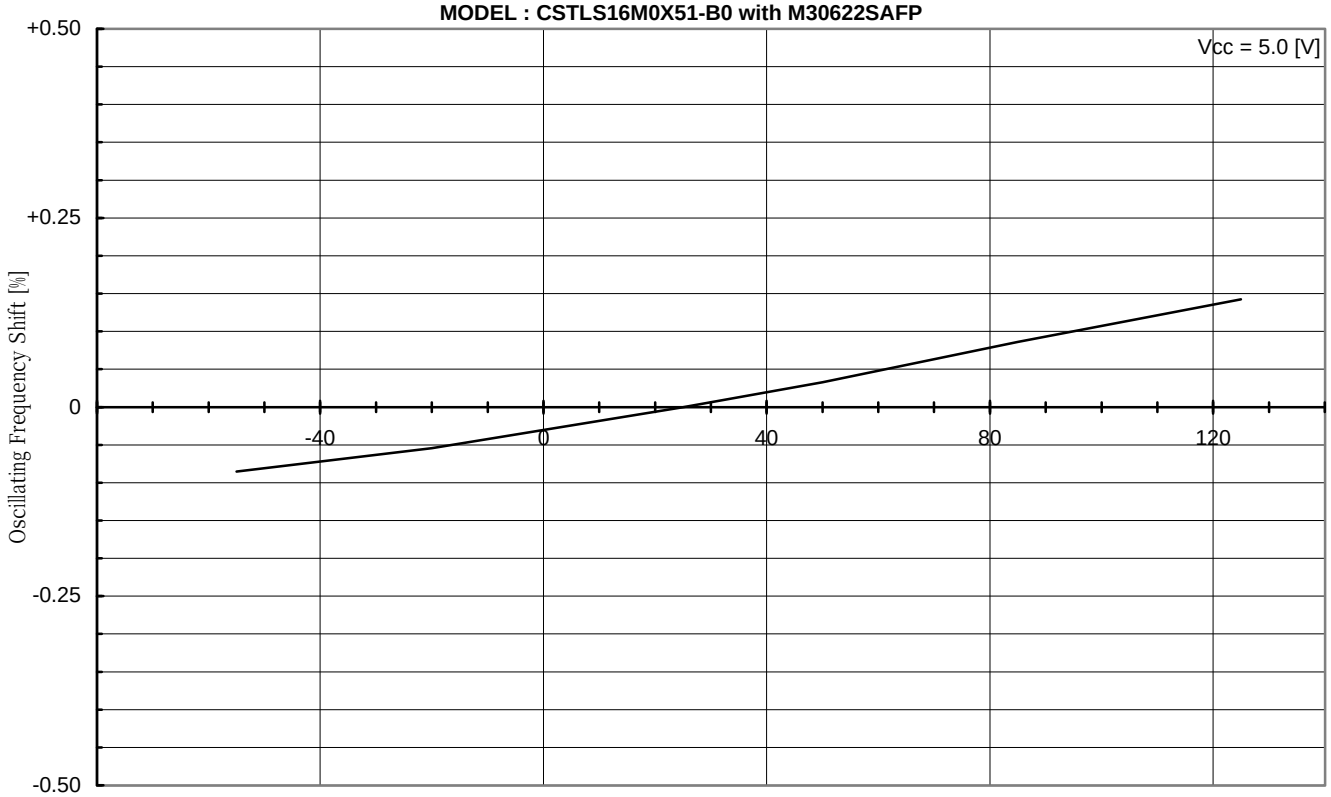


Xin : 15
Xout: 13
H : 16,61,62,73~80,99
L : 8,11,14,29,30,64,81~84,96,98

Recommended Value
CERALOCK® : CSTLS16M0X51-B0
Vcc = 2.5 to 6.5 [V]
C1 = 5 [pF] (Typ.)
C2 = 5 [pF] (Typ.)
Ta = -40 to 125 [°C]

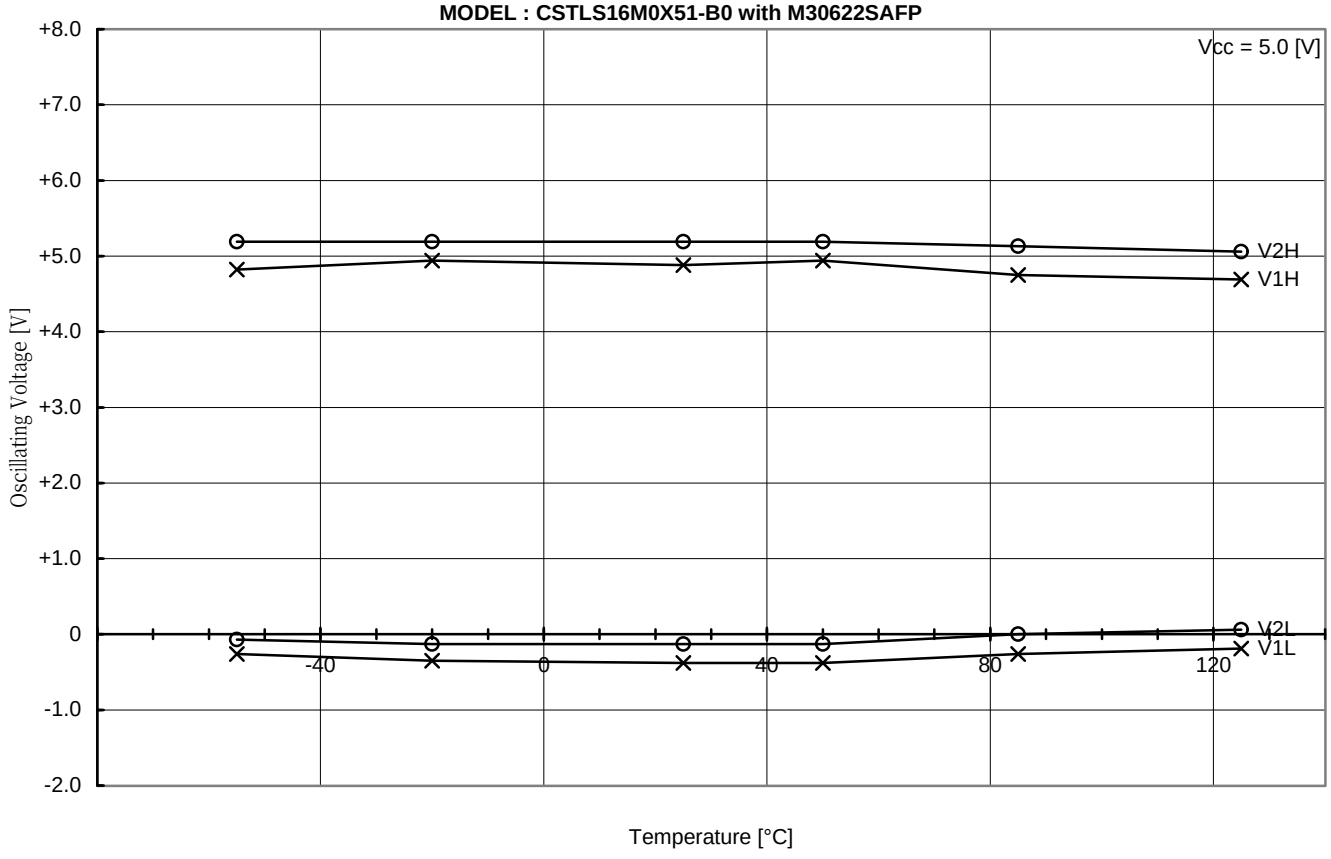
Temperature Characteristics of Oscillating Frequency

MODEL : CSTLS16M0X51-B0 with M30622SAFP

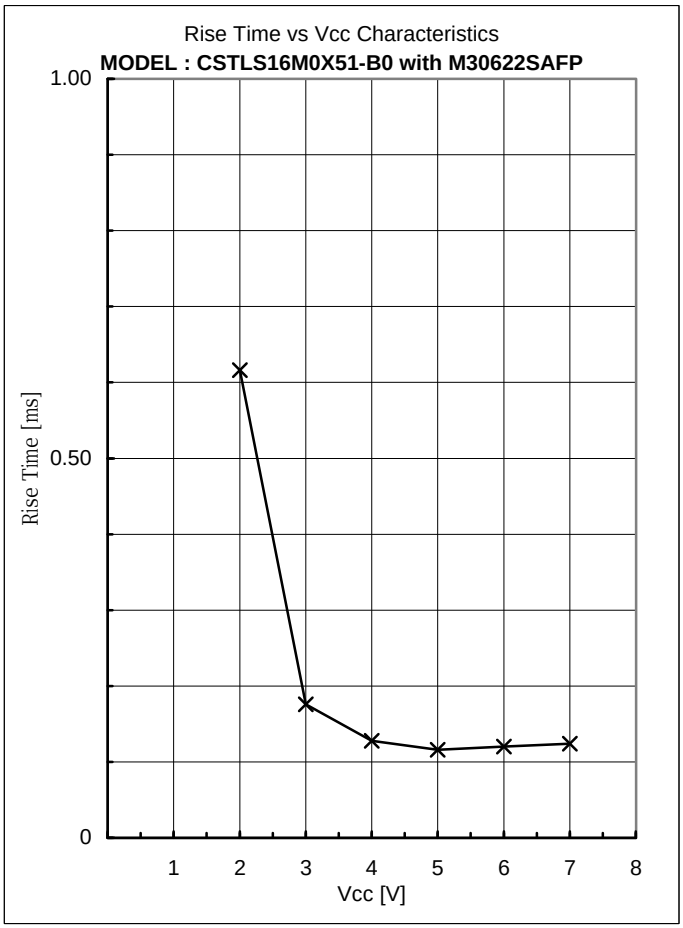


Temperature Characteristics of Oscillating Voltage

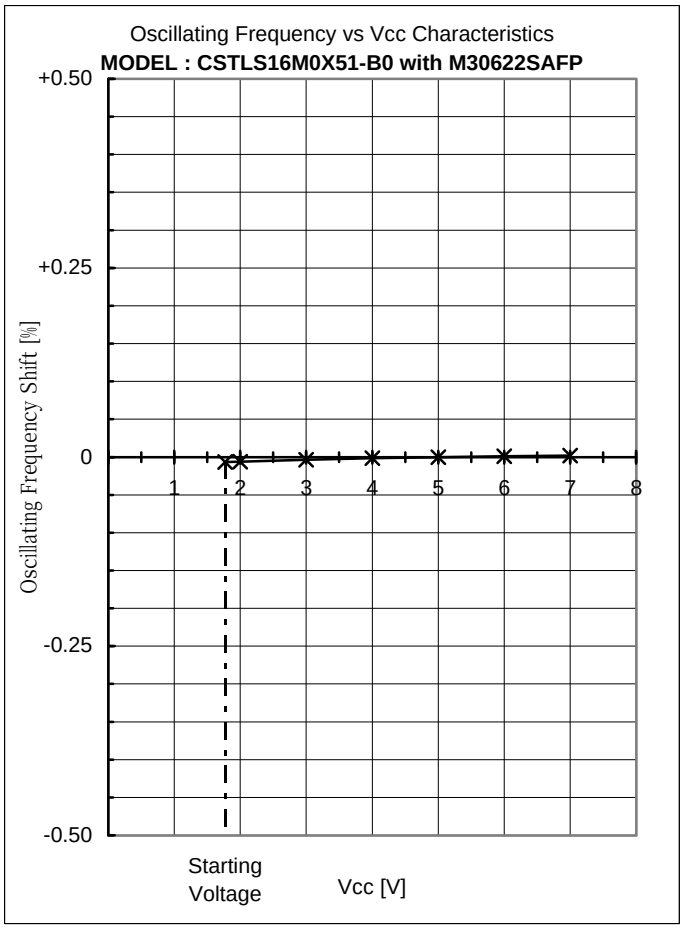
MODEL : CSTLS16M0X51-B0 with M30622SAFP



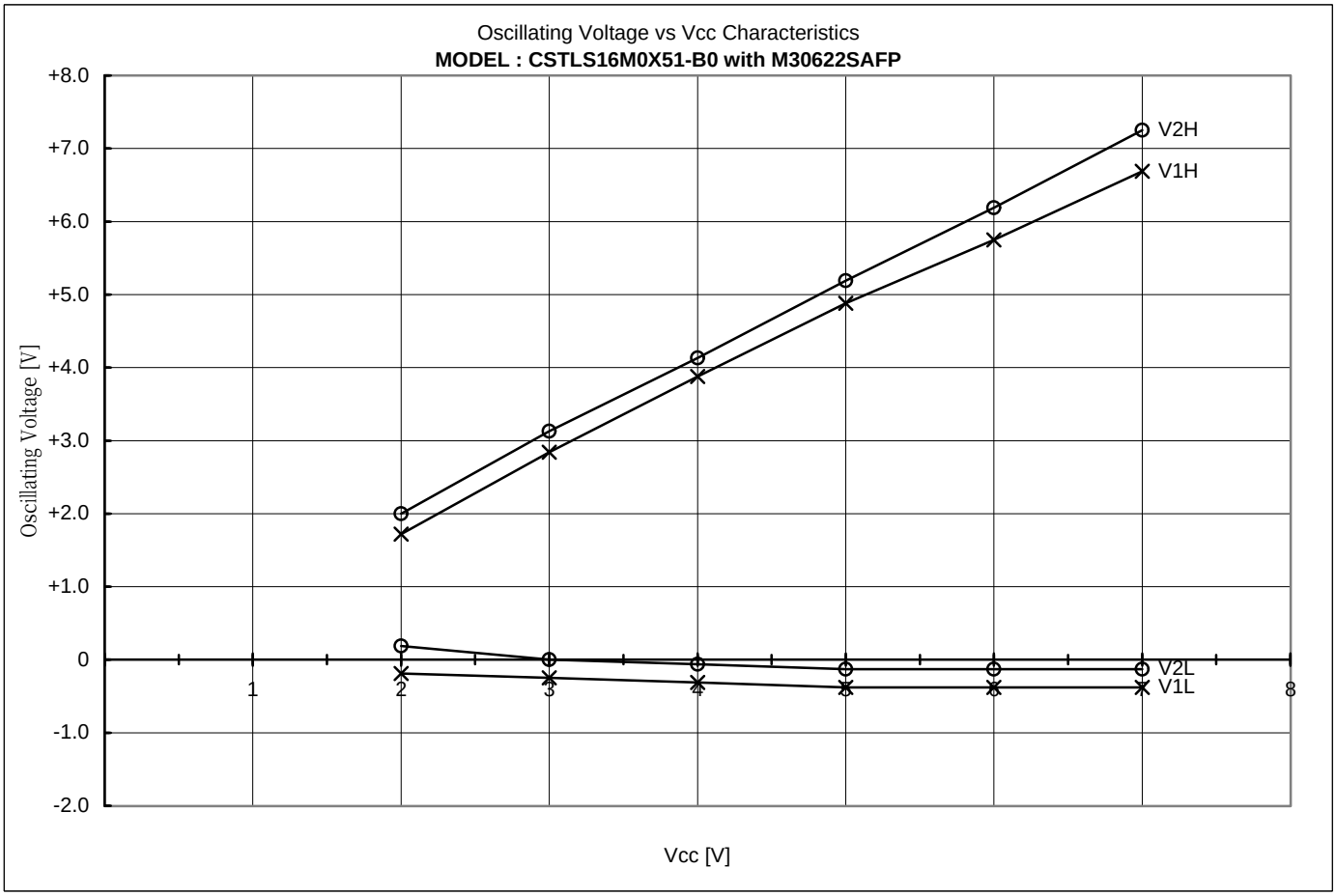
Rise Time vs Vcc Characteristics
MODEL : CSTLS16M0X51-B0 with M30622SAFP



Oscillating Frequency vs Vcc Characteristics
MODEL : CSTLS16M0X51-B0 with M30622SAFP



Oscillating Voltage vs Vcc Characteristics
MODEL : CSTLS16M0X51-B0 with M30622SAFP



Appendixes

Comparison Table

IC : No	V1H [V]	V1L [V]	V1p-p [V]	V2H [V]	V2L [V]	V2p-p [V]	Fosc [kHz]	Trise [ms]	Vstart [V]
1	4.81	-0.38	5.19	5.19	-0.13	5.32	16033.457	0.116	1.77
2	4.81	-0.38	5.19	5.19	-0.13	5.32	16033.387	0.123	1.77
3	4.88	-0.38	5.26	5.16	-0.13	5.29	16033.723	0.123	1.78
4	4.88	-0.38	5.26	5.19	-0.13	5.32	16033.504	0.120	1.76
5	4.88	-0.38	5.26	5.16	-0.13	5.29	16033.877	0.109	1.75

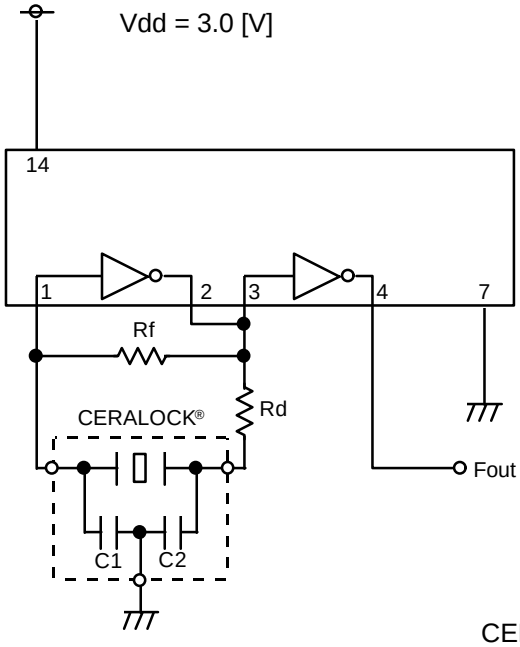
Ref.

Performance described page 2 to 3 were measured with IC No. 1

Frequency Correlation Data

Sample No.	M30622SAFP Fosc [kHz]	TC74HCU04 Fosc [kHz]	Shift [%]
1	16033.511	16036.704	-0.0199
2	16032.802	16035.185	-0.0149
3	16037.353	16040.122	-0.0173
4	16046.573	16049.097	-0.0157
5	16035.077	16037.697	-0.0163
$\bar{X}$	16037.063	16039.761	-0.0168

muRata Standard Circuit



CERALOCK® : CSTLS16M0X51-B0
C1 = 5 [pF]
C2 = 5 [pF]
Rf = 1 [Mohm]
Rd = 470 [ohm]