

SAMSUNG

OPERATION TEST REPORT ON TDK CERAMIC RESONATOR

(FCR4.0MC5)

IC S3F84BBXZZ (SAMSUNG)

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Sensors & Actuators Division,
TDK CORPORATION

ISSUED BY Chikako Tomizawa

APPROVED	CHECKED	CHECKED
I.Katoh		

1.Contents

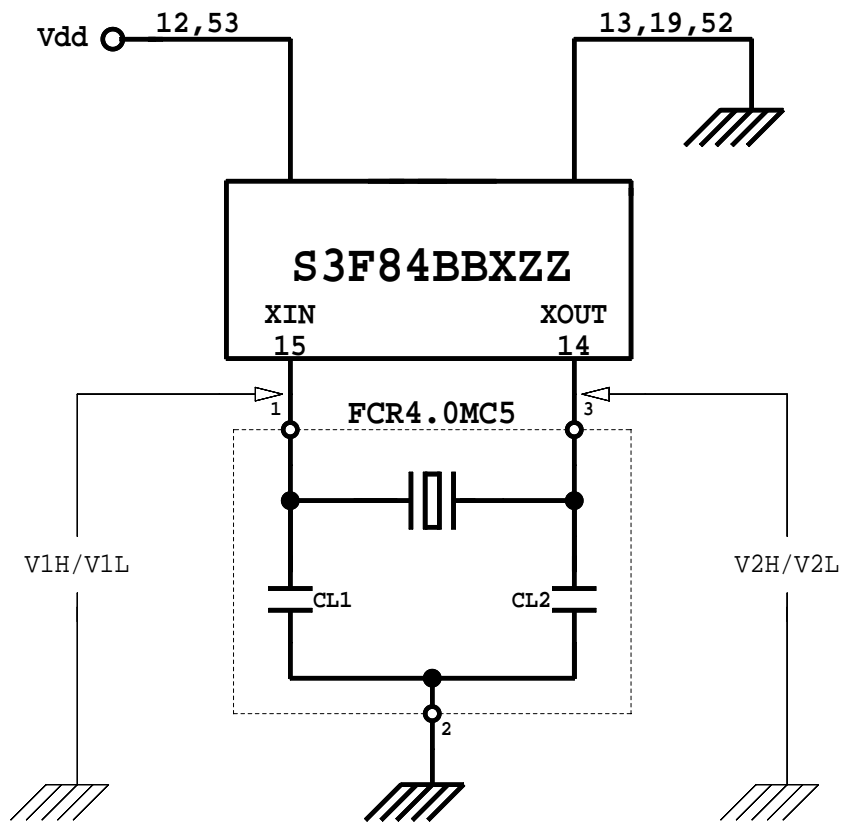
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2.Conclusions

We could confirm the operation satisfactory under
the following test conditions.

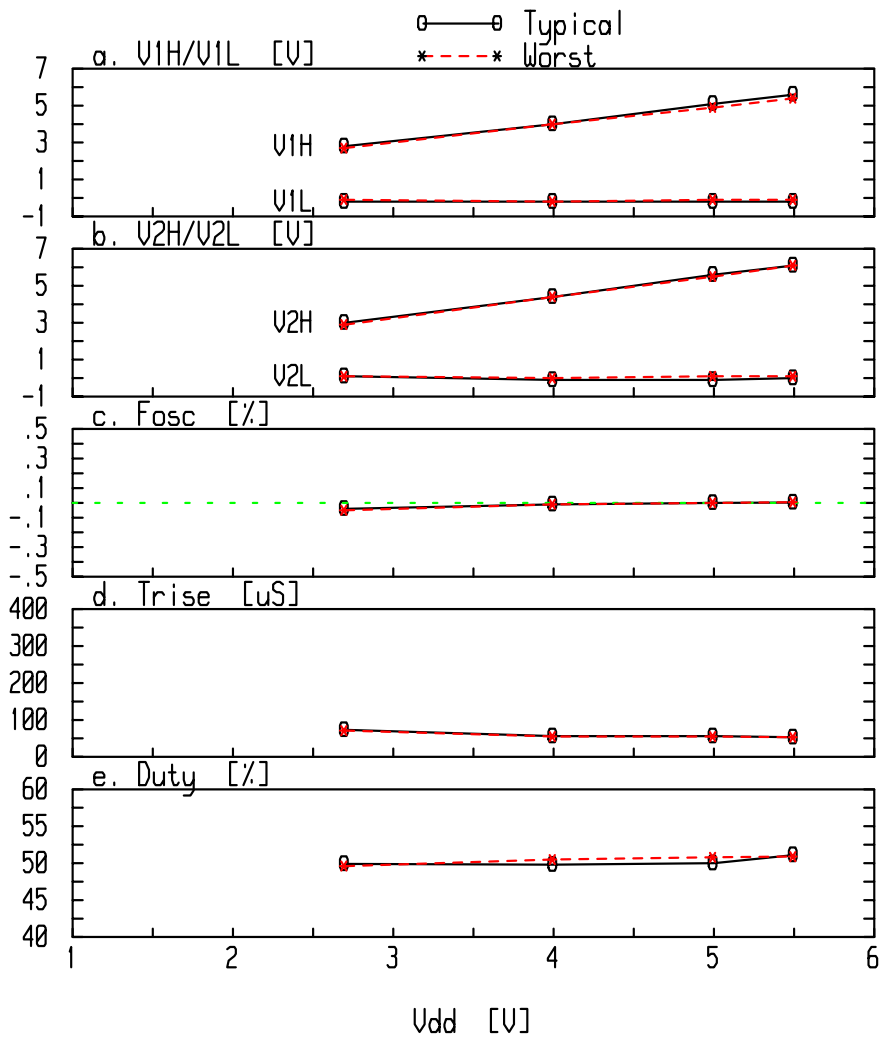
Test Conditions

IC	: S3F84BBXZZ (SAMSUNG)
Ceramic Resonator	: FCR4.0MC5 (Typical and worst sample are tested)
Power Supply Voltage	: 2.7(V) ~ 5.5(V)
Temperature Range	: -25(°C) ~ 85(°C)



*BUILT-IN LOADING CAPACITOR
 CL1/CL2=30/30pF +/-20%

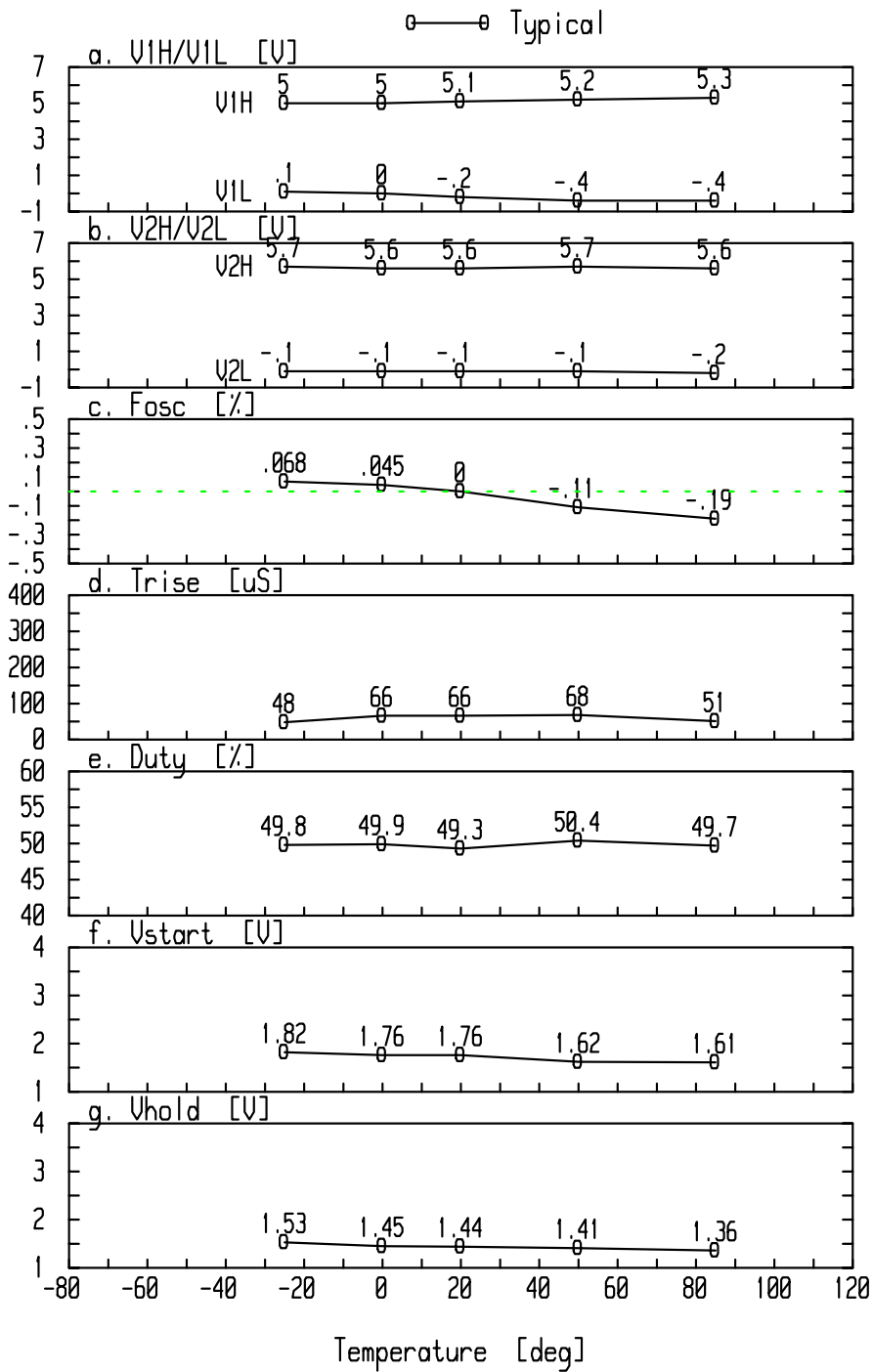
Oscillating circuit for evaluation



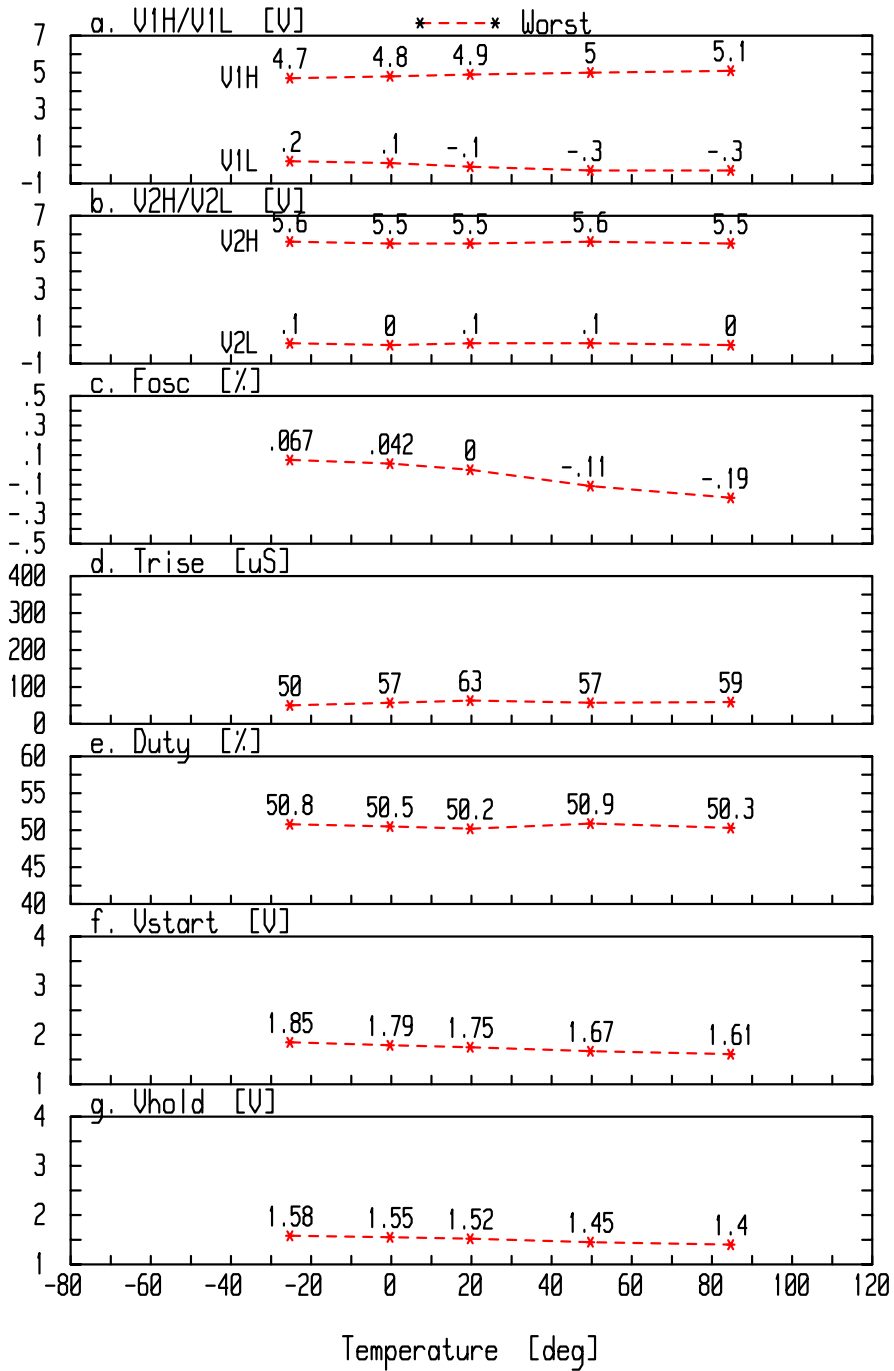
f. Vstart [V]
 Typical = 1.69
 Worst = 1.72

g. Vhold [V]
 Typical = 1.44
 Worst = 1.5

Power supply voltage dependence of oscillating characteristics



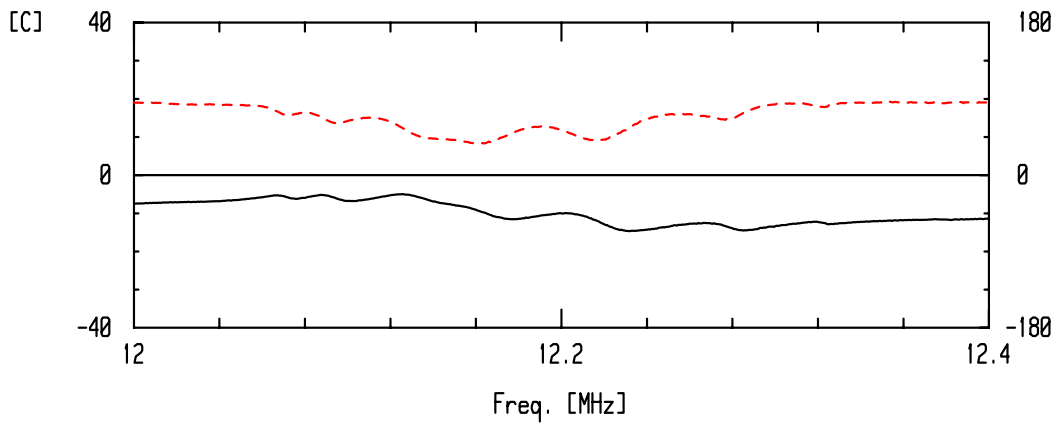
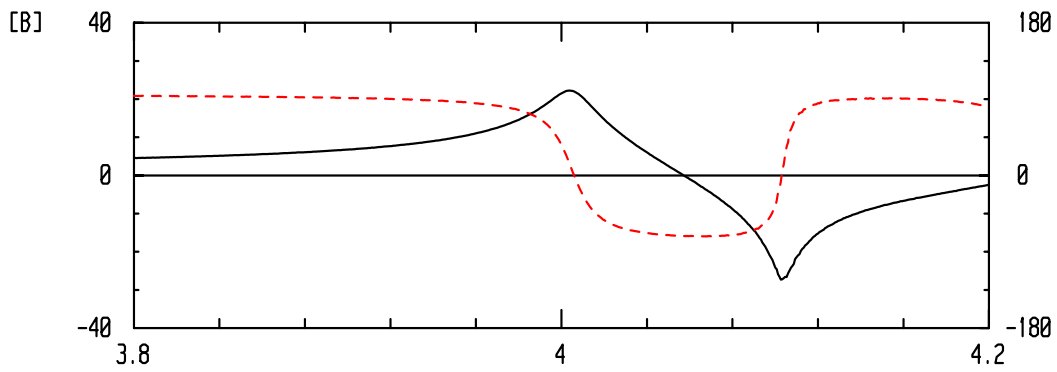
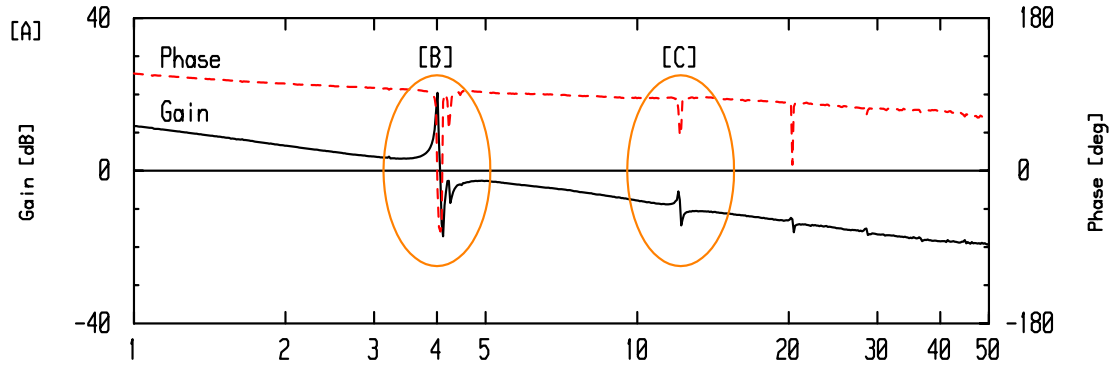
Temperature dependence of oscillating characteristics



Temperature dependence of oscillating characteristics

S3F84BBXZZ - 1
 FCR4.0MC5 - Typical
 Vdd [V] 5

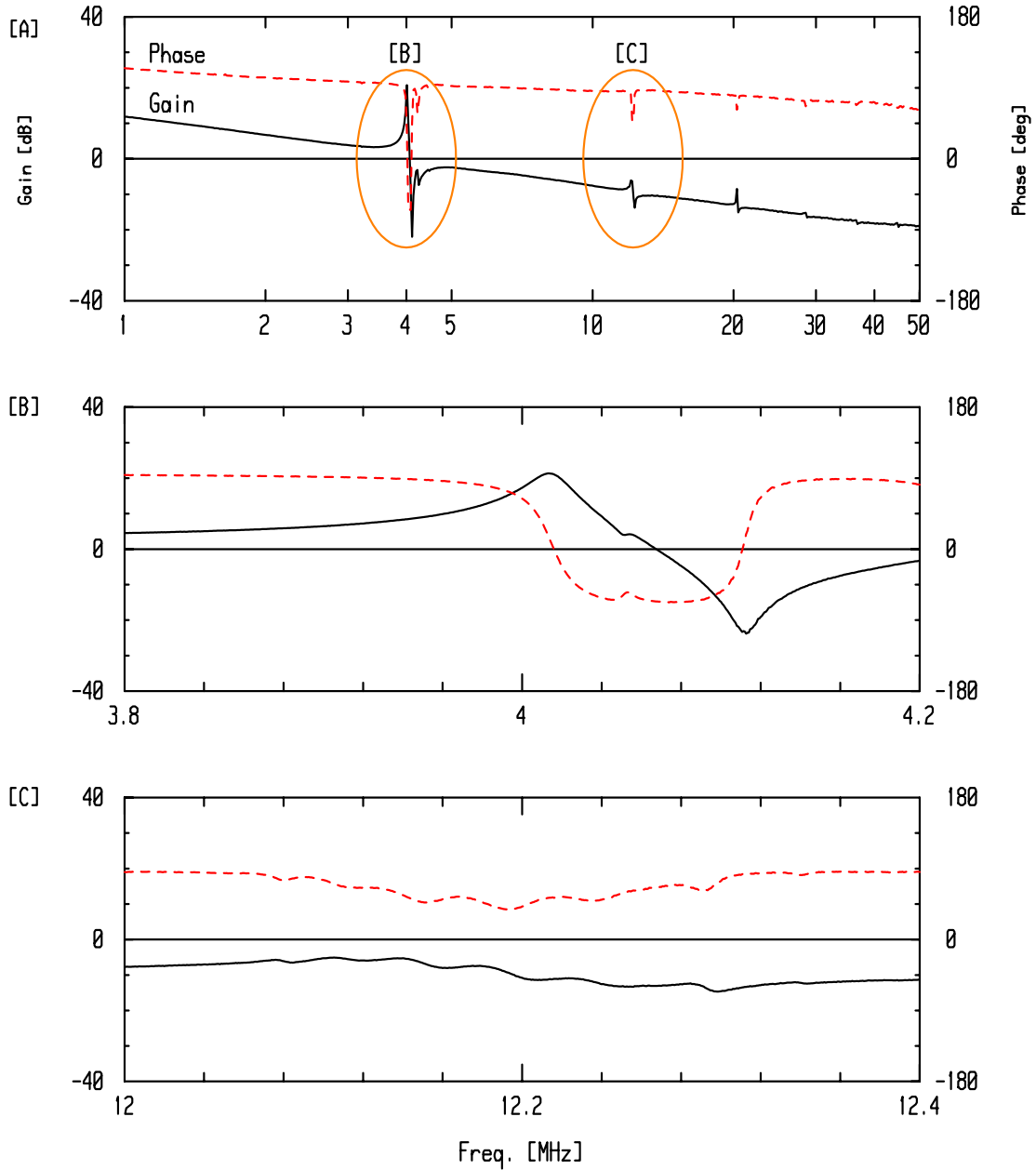
	[B]	[C]
Gmax [dB]	22.24	-4.97
LGM [dB]	22.11	0
FLGM [MHz]	4.0063	0
LPM [deg]	-71.4	40.57



Open loop characteristics (Typical Sample)

S3F84BBXZZ - 1
 FCR4.0MC5 - Worst
 Vdd [V] 5

	[B]	[C]
Gmax [dB]	21.34	-5.09
LGM [dB]	21.2	0
FLGM [MHz]	4.0163	0
LPM [deg]	-66.34	48.96



Open loop characteristics (Worst Sample)