

SAMSUNG

OPERATION TEST REPORT ON TDK CERAMIC RESONATOR

(FCR4.0MC5)

IC S3P848AXZZ(SAMSUNG)

AUG,05,2002

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APPROVED	CHECKED	CHECKED
I.Katoh		

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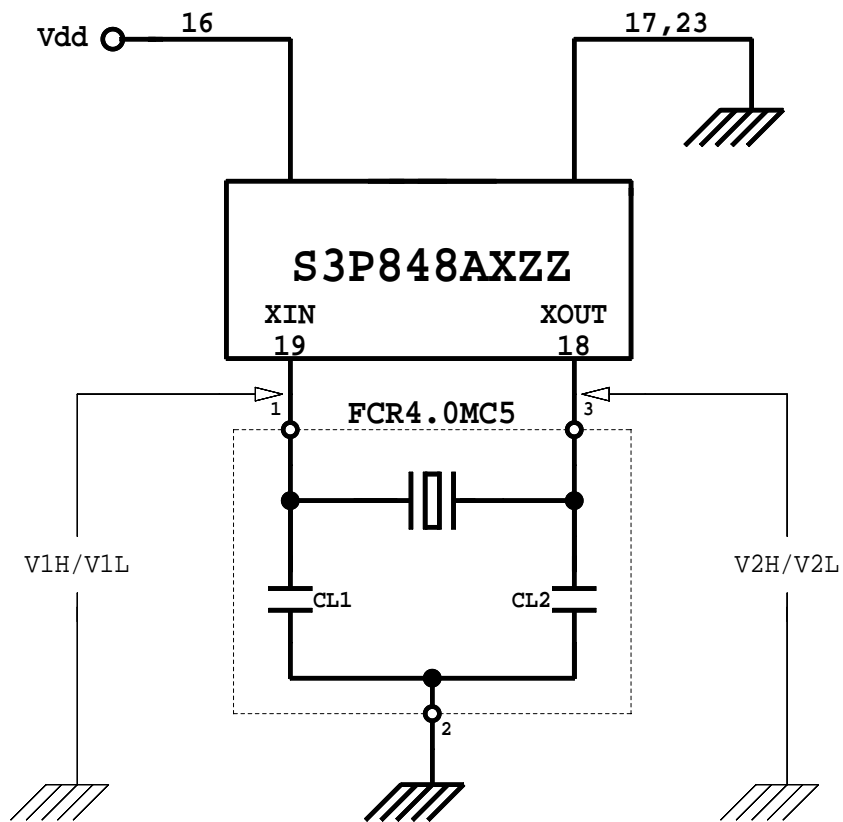
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2.Conclusions

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

Test Conditions

IC	:	S3P848AXZZ (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)

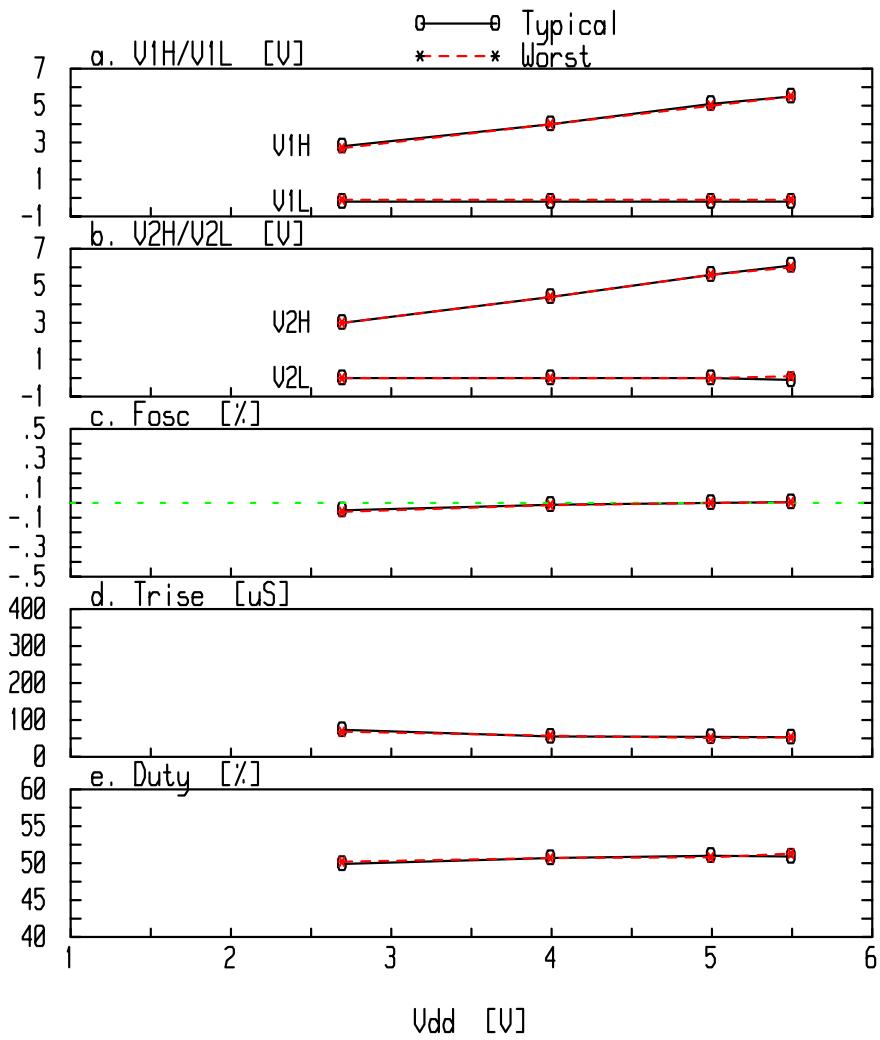


*BUILT-IN LOADING CAPACITOR
 CL1/CL2=30/30pF +/-20%

Oscillating circuit for evaluation

S3P848AXZZ - 1

FCR4.0MC5
Ta= 20 [deg]



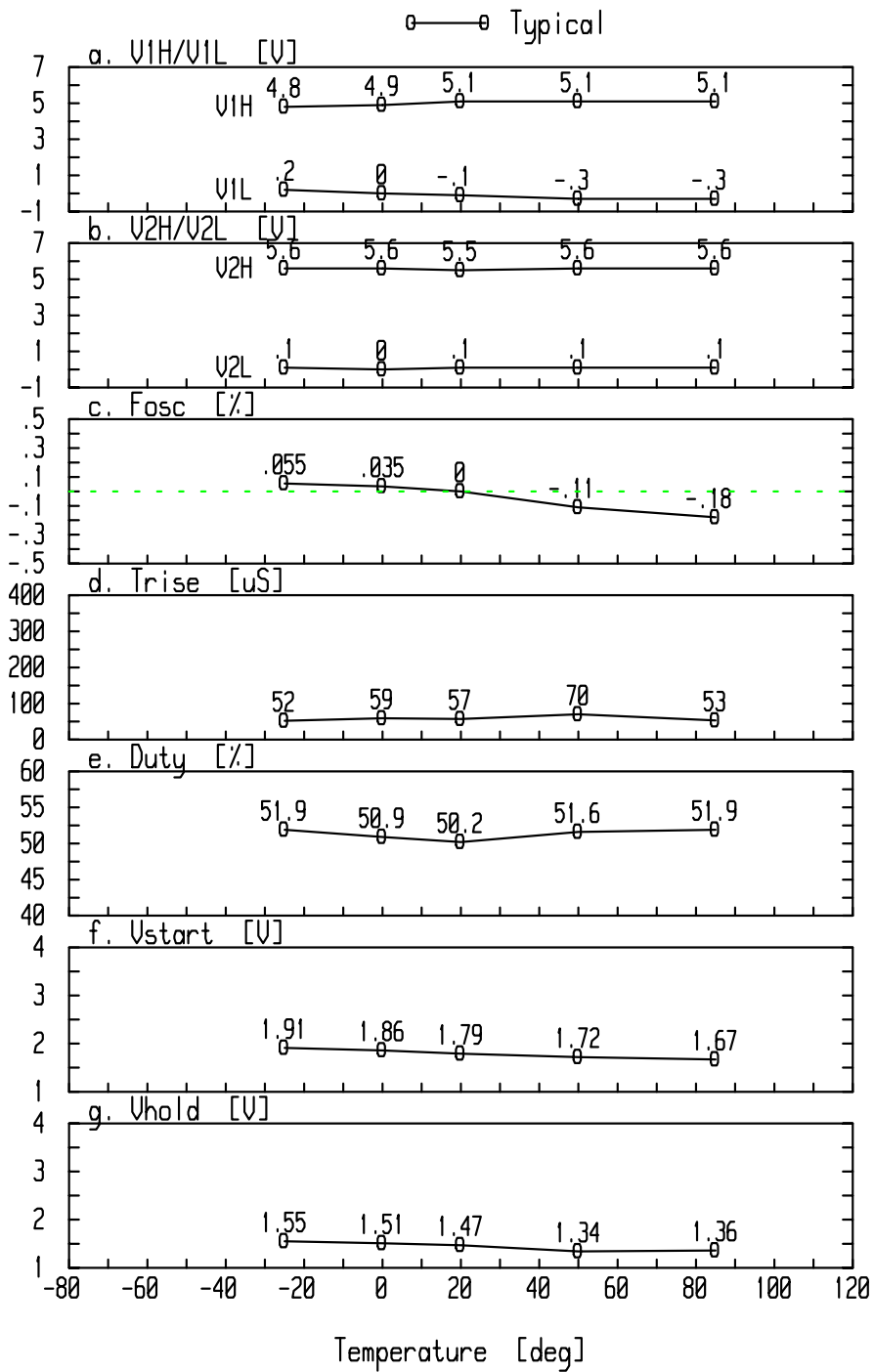
f. U_{start} [V]

Typical = 1.77
Worst = 1.78

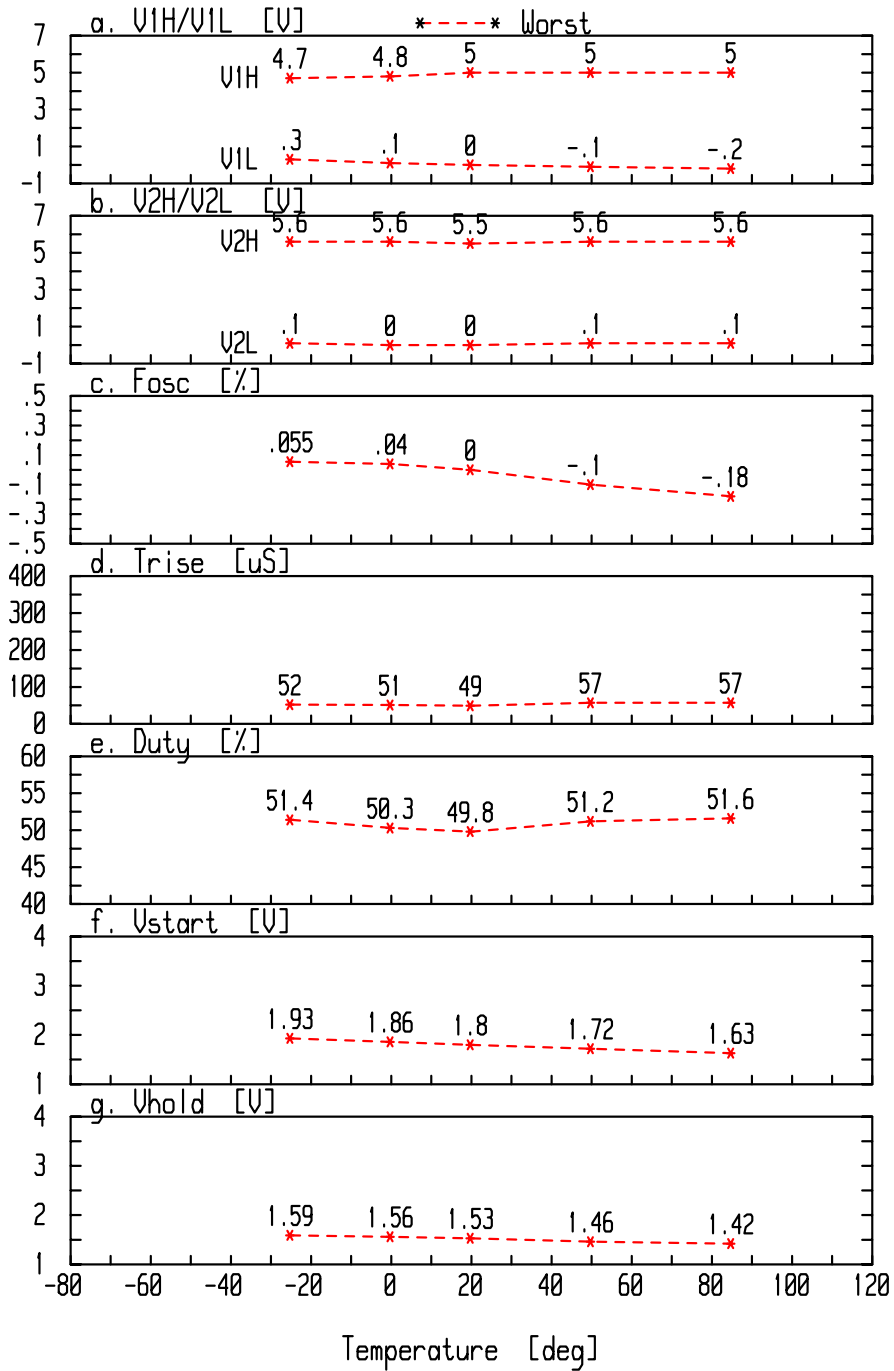
g. U_{hold} [V]

Typical = 1.46
Worst = 1.52

Power supply voltage dependence of oscillating characteristics



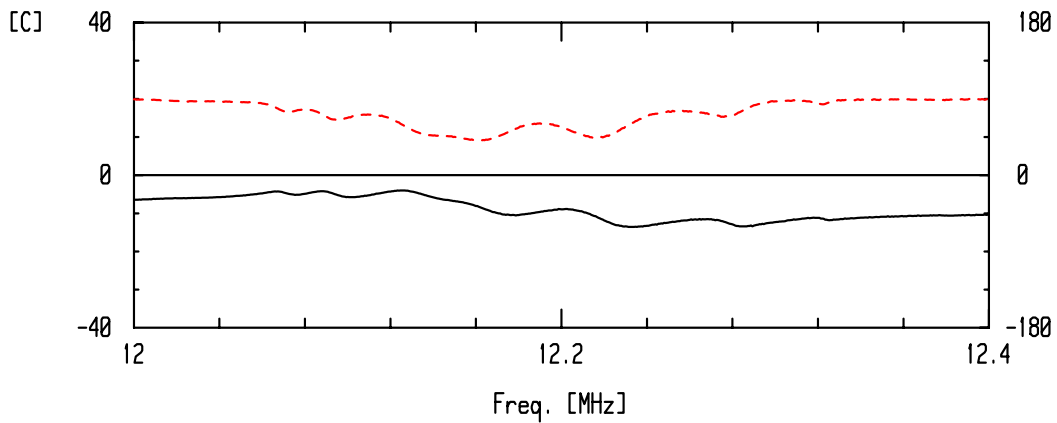
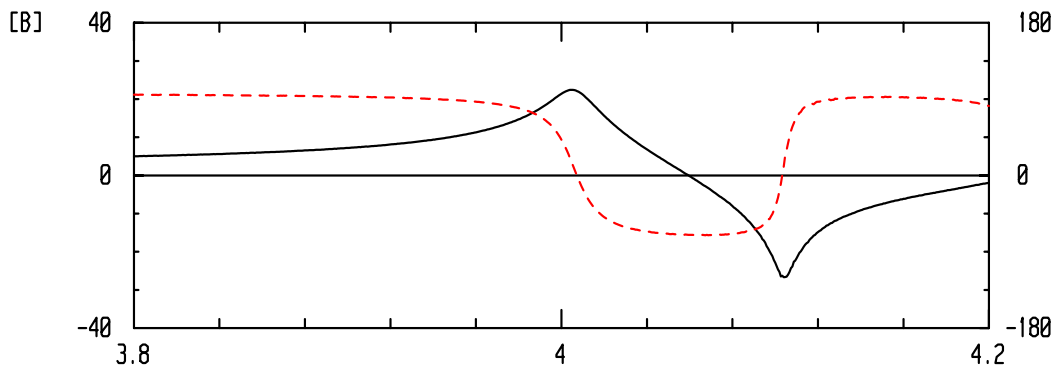
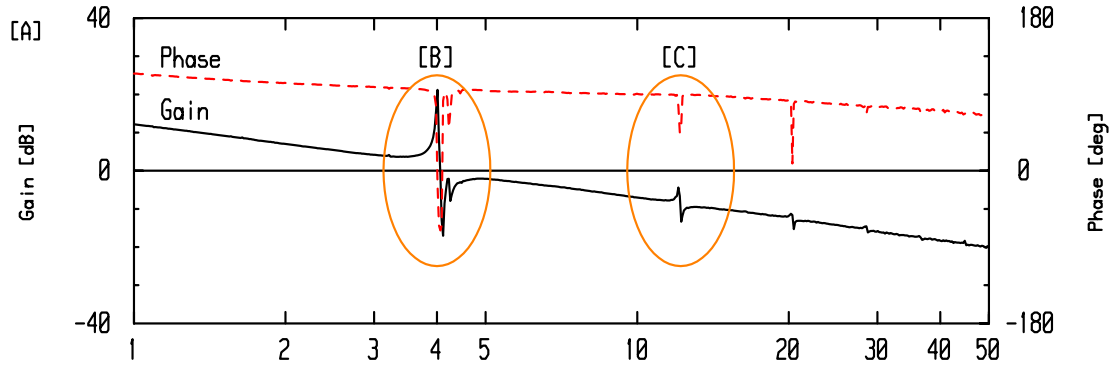
Temperature dependence of oscillating characteristics



Temperature dependence of oscillating characteristics

S3P848AXZZ - 1
 FCR4.0MC5 - Typical
 Vdd [V] 5

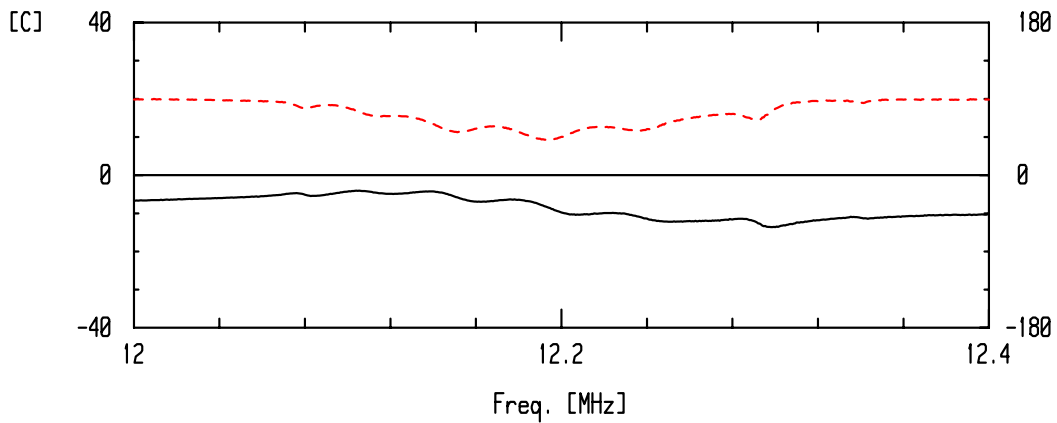
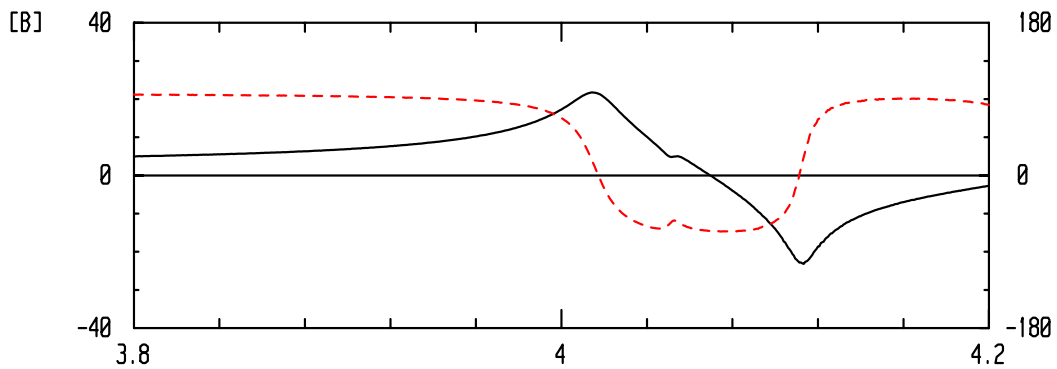
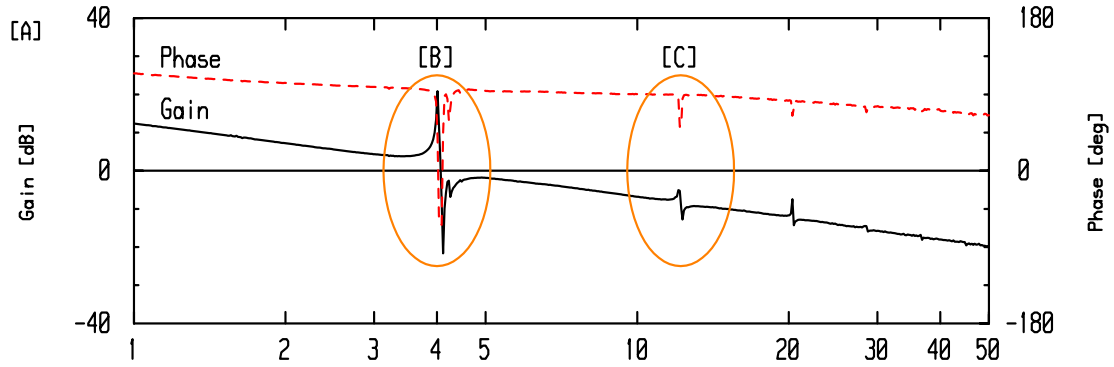
	[B]	[C]
Gmax [dB]	22.43	-4
LGM [dB]	22.24	0
FLGM [MHz]	4.0075	0
LPM [deg]	-70.03	43.67



Open loop characteristics (Typical Sample)

S3P848AXZZ - 1
 FCR4.0MC5 - Worst
 Vdd [V] 5

	[B]	[C]
Gmax [dB]	21.75	-4.08
LGM [dB]	21.56	0
FLGM [MHz]	4.0176	0
LPM [deg]	-65.39	52.13



Open loop characteristics (Worst Sample)