

SAMSUNG

OPERATION TEST REPORT ON TDK CERAMIC RESONATOR

(FCR10.0MC5)

IC S3P848AXZZ(SAMSUNG)

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APPROVED	CHECKED	CHECKED
I.Katoh		

## 1.Contents

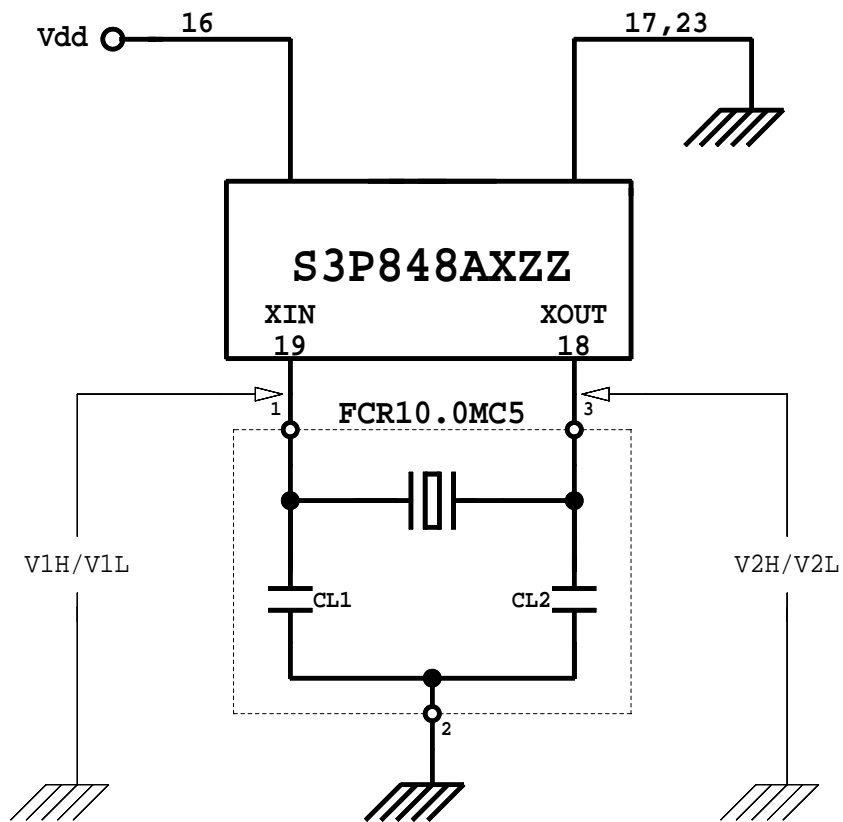
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## 2.Conclusions

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

### Test Conditions

IC	: S3P848AXZZ (SAMSUNG)
Ceramic Resonator	: FCR10.0MC5 (Typical and worst sample are tested)
Power Supply Voltage	: 2.7(V) ~ 5.5(V)
Temperature Range	: -25(°C) ~ 85(°C)

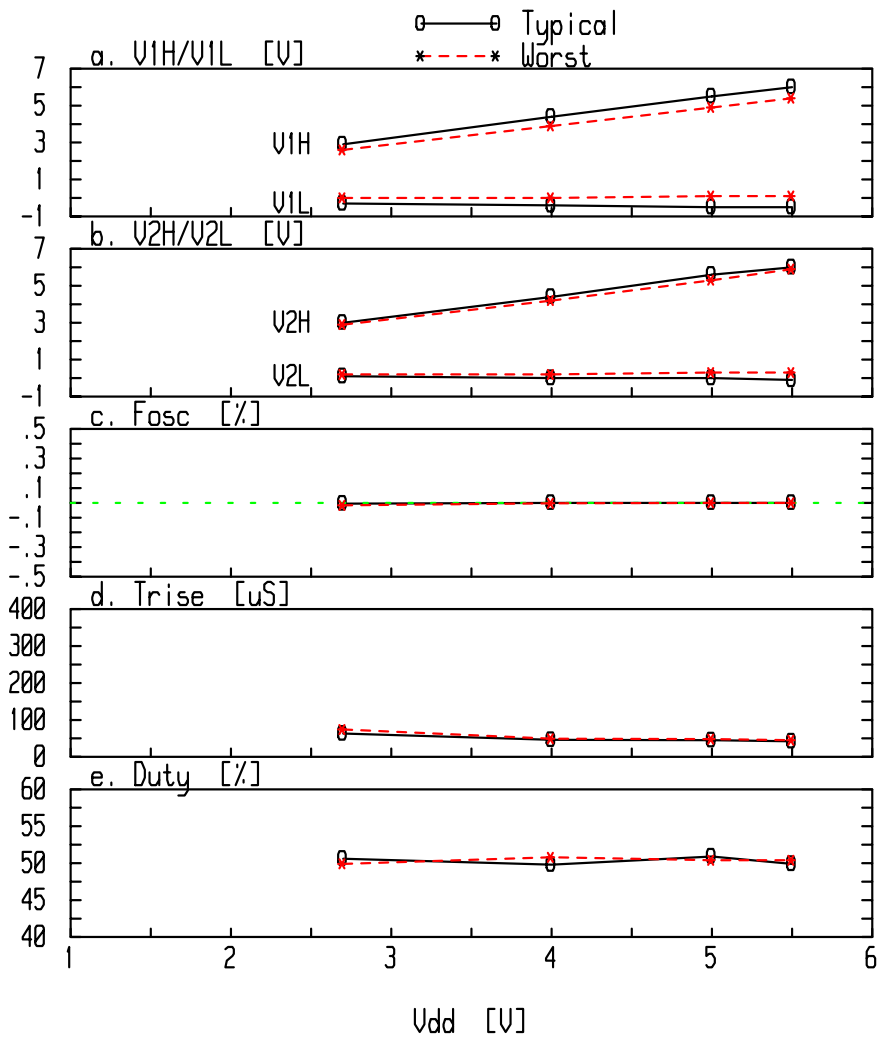


\*BUILT-IN LOADING CAPACITOR  
 CL1/CL2=20/20pF +/-20%

Oscillating circuit for evaluation

S3P848AXZZ - 1

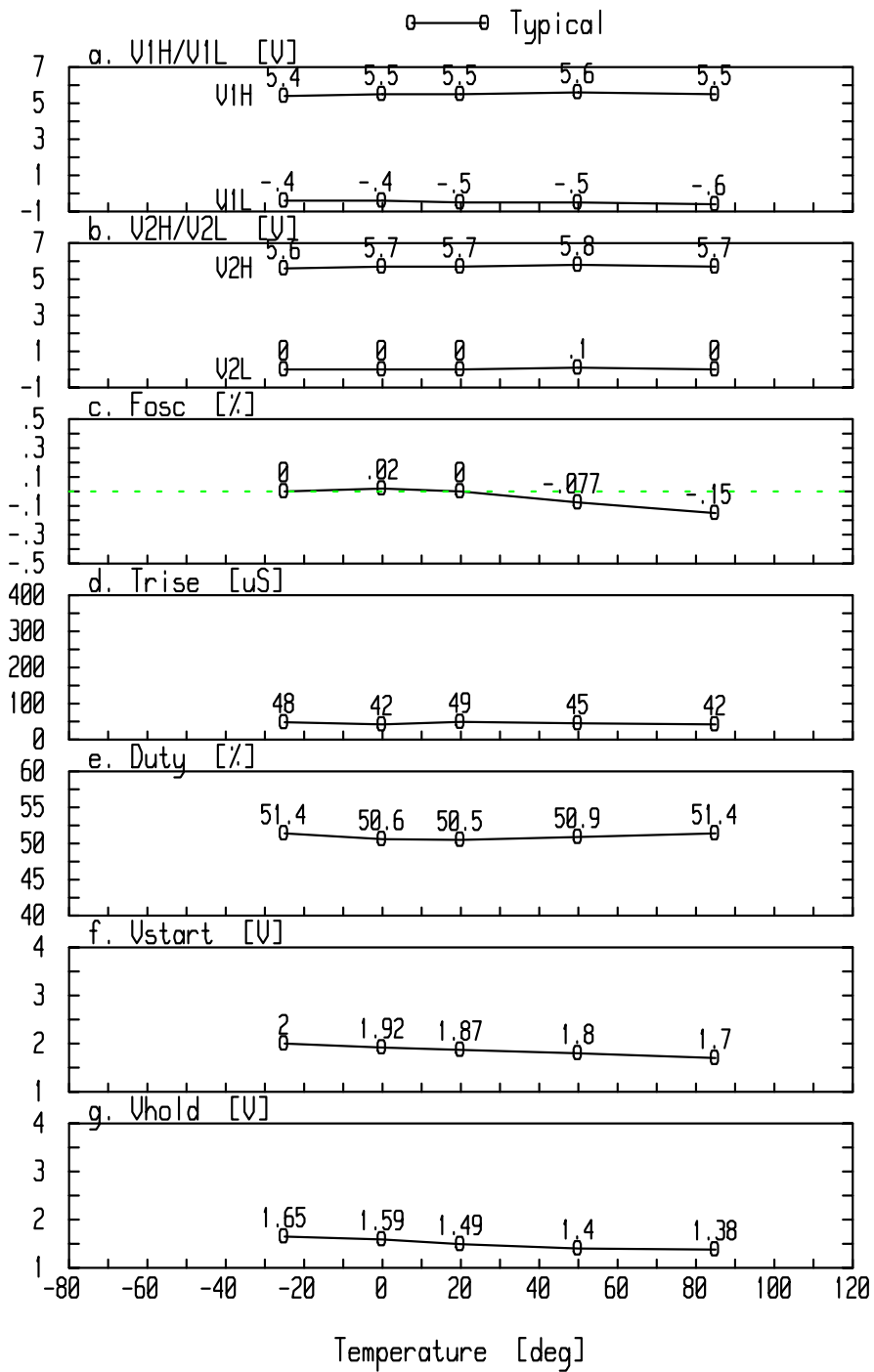
FCR10.0MC5  
Ta= 20 [deg]



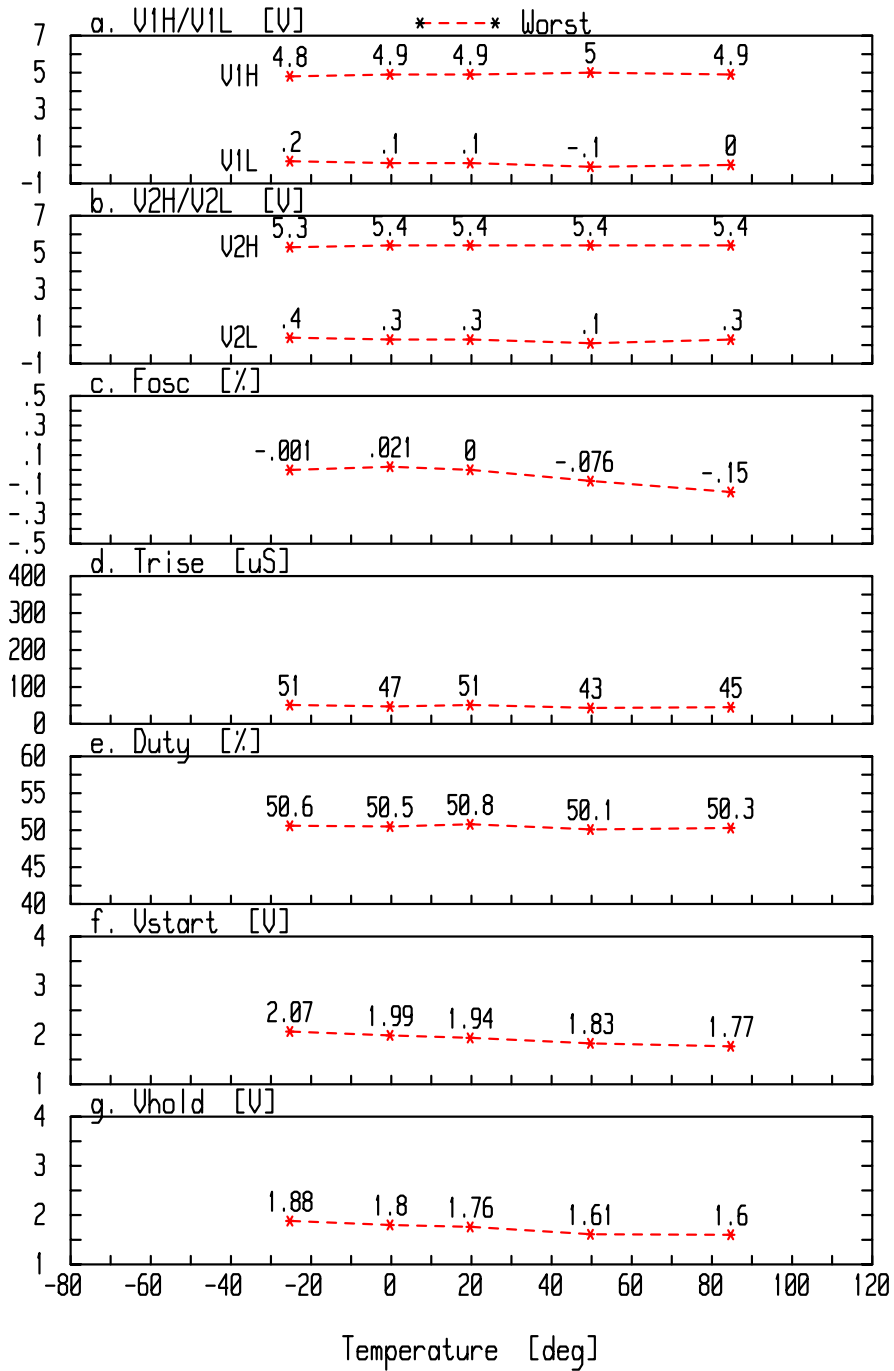
f. V<sub>start</sub> [V]  
Typical = 1.85  
Worst = 1.91

g. V<sub>hold</sub> [V]  
Typical = 1.49  
Worst = 1.72

Power supply voltage dependence of oscillating characteristics



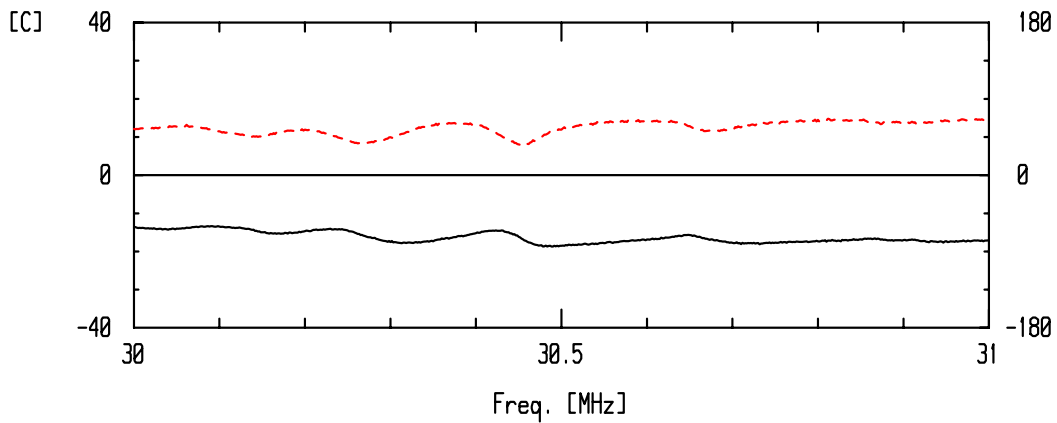
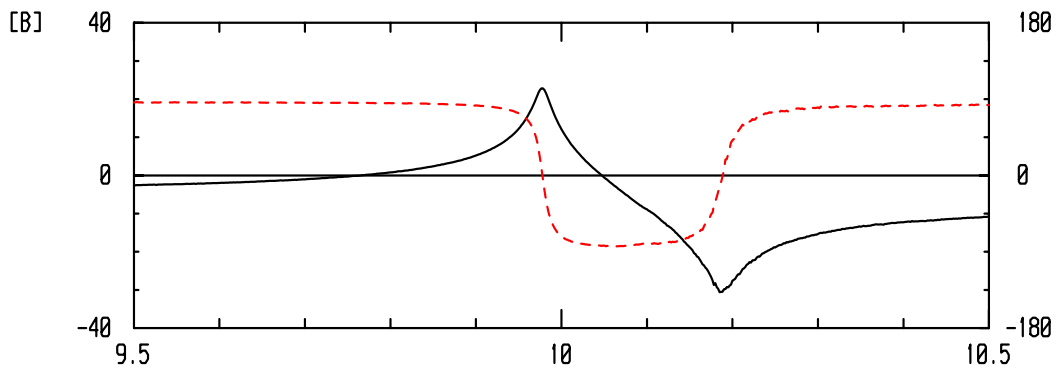
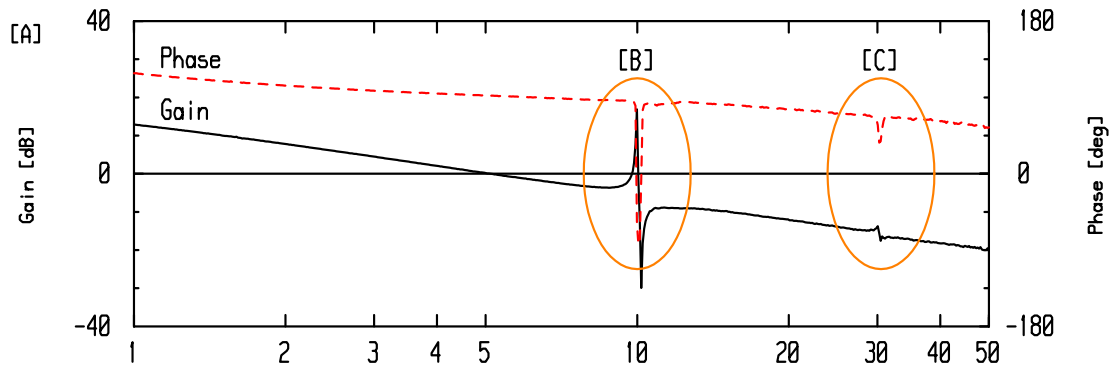
Temperature dependence of oscillating characteristics



Temperature dependence of oscillating characteristics

S3P848AXZZ - 1  
 FCR10.0MC5 - Typical  
 Vdd [V] 5

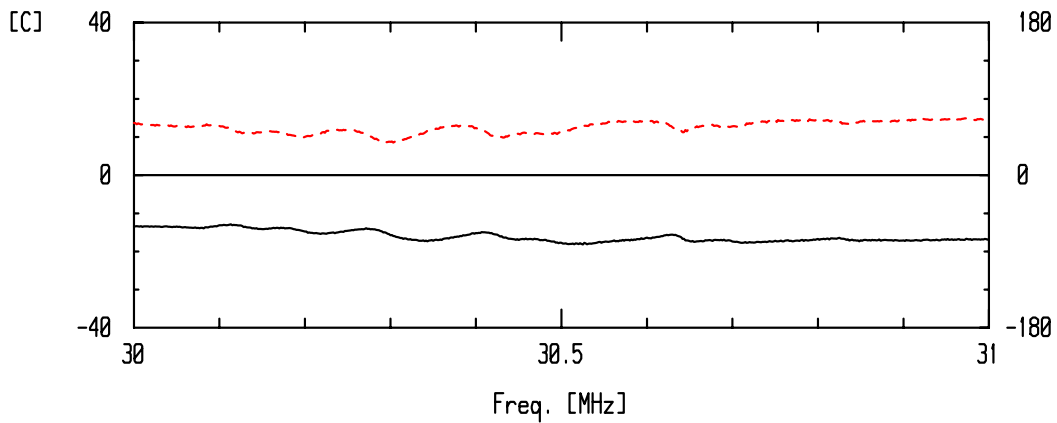
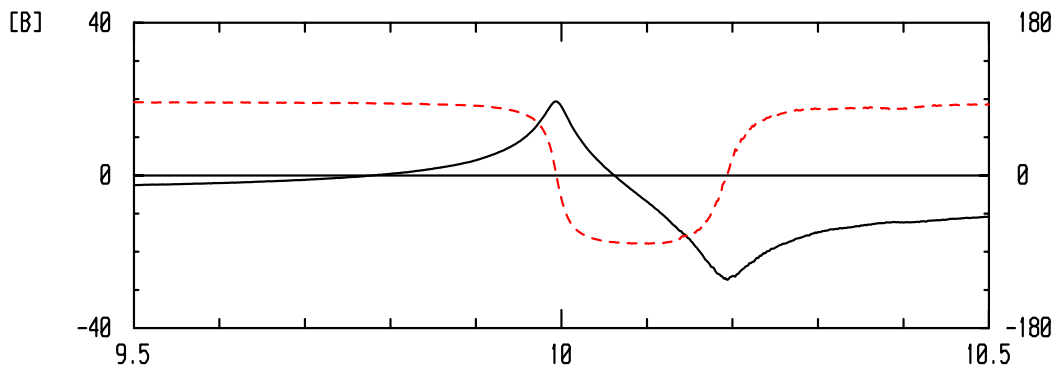
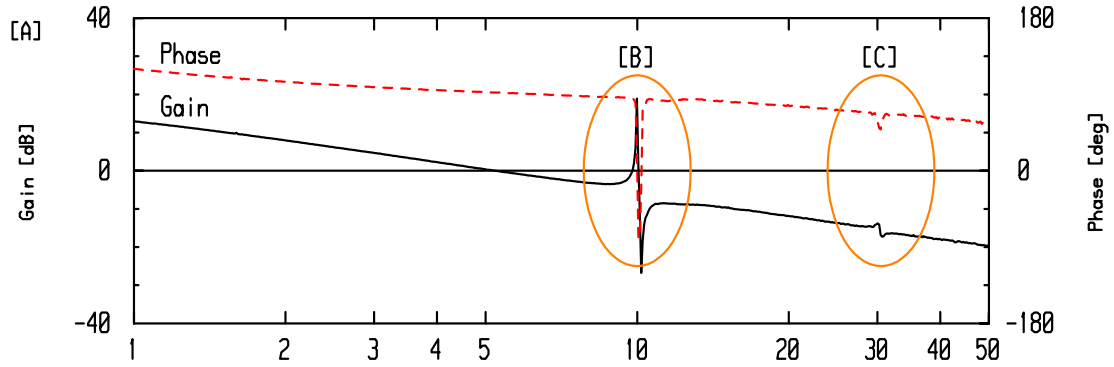
	[B]	[C]
Gmax [dB]	22.83	-13.36
LGM [dB]	22.83	0
FLGM [MHz]	9.9786	0
LPM [deg]	-83.12	46.3



Open loop characteristics (Typical Sample)

S3P848AXZZ - 1  
 FCR10.0MC5 - Worst  
 Vdd [V] 5

	[B]	[C]
Gmax [dB]	19.44	-12.88
LGM [dB]	19.39	0
FLGM [MHz]	9.995	0
LPM [deg]	-78.67	48.48



Open loop characteristics (Worst Sample)