

# 1. Frequency Stability

## 1.1 GSM850

### 1.1.1 Test Result

Band: GSM850							
Network	Frequency (MHz)	Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
					Result	Limit	
GPRS	824.2	20	3.27	38.518	0.0467	-2.5 to 2.5	Pass
			3.85	37.249	0.0452	-2.5 to 2.5	Pass
			4.43	36.860	0.0447	-2.5 to 2.5	Pass
		-30	3.85	36.945	0.0448	-2.5 to 2.5	Pass
		-20	3.85	35.371	0.0429	-2.5 to 2.5	Pass
		-10	3.85	34.212	0.0415	-2.5 to 2.5	Pass
		0	3.85	35.641	0.0432	-2.5 to 2.5	Pass
		10	3.85	36.109	0.0438	-2.5 to 2.5	Pass
		30	3.85	34.432	0.0418	-2.5 to 2.5	Pass
		40	3.85	33.453	0.0406	-2.5 to 2.5	Pass
		50	3.85	35.173	0.0427	-2.5 to 2.5	Pass
	836.6	20	3.27	36.205	0.0433	-2.5 to 2.5	Pass
			3.85	34.966	0.0418	-2.5 to 2.5	Pass
			4.43	34.082	0.0407	-2.5 to 2.5	Pass
		-30	3.85	35.674	0.0426	-2.5 to 2.5	Pass
		-20	3.85	34.474	0.0412	-2.5 to 2.5	Pass
		-10	3.85	34.008	0.0407	-2.5 to 2.5	Pass
		0	3.85	33.886	0.0405	-2.5 to 2.5	Pass
		10	3.85	34.654	0.0414	-2.5 to 2.5	Pass
		30	3.85	33.343	0.0399	-2.5 to 2.5	Pass
		40	3.85	35.435	0.0424	-2.5 to 2.5	Pass
		50	3.85	33.947	0.0406	-2.5 to 2.5	Pass
	848.8	20	3.27	35.471	0.0418	-2.5 to 2.5	Pass
			3.85	35.112	0.0414	-2.5 to 2.5	Pass
			4.43	36.097	0.0425	-2.5 to 2.5	Pass
		-30	3.85	34.530	0.0407	-2.5 to 2.5	Pass
		-20	3.85	32.958	0.0388	-2.5 to 2.5	Pass
		-10	3.85	32.853	0.0387	-2.5 to 2.5	Pass
		0	3.85	34.289	0.0404	-2.5 to 2.5	Pass
		10	3.85	32.234	0.0380	-2.5 to 2.5	Pass
		30	3.85	34.329	0.0404	-2.5 to 2.5	Pass
		40	3.85	34.397	0.0405	-2.5 to 2.5	Pass
		50	3.85	33.294	0.0392	-2.5 to 2.5	Pass
EGPRS	824.2	20	3.27	34.439	0.0418	-2.5 to 2.5	Pass
			3.85	32.674	0.0396	-2.5 to 2.5	Pass
			4.43	34.649	0.0420	-2.5 to 2.5	Pass
		-30	3.85	33.598	0.0408	-2.5 to 2.5	Pass
		-20	3.85	30.652	0.0372	-2.5 to 2.5	Pass
		-10	3.85	28.981	0.0352	-2.5 to 2.5	Pass
		0	3.85	33.205	0.0403	-2.5 to 2.5	Pass
		10	3.85	30.267	0.0367	-2.5 to 2.5	Pass
		30	3.85	31.695	0.0385	-2.5 to 2.5	Pass
		40	3.85	29.841	0.0362	-2.5 to 2.5	Pass
		50	3.85	31.598	0.0383	-2.5 to 2.5	Pass
	836.6	20	3.27	29.313	0.0350	-2.5 to 2.5	Pass
			3.85	30.794	0.0368	-2.5 to 2.5	Pass
			4.43	29.946	0.0358	-2.5 to 2.5	Pass
		-30	3.85	31.993	0.0382	-2.5 to 2.5	Pass
		-20	3.85	30.542	0.0365	-2.5 to 2.5	Pass

		-10	3.85	28.701	0.0343	-2.5 to 2.5	Pass
		0	3.85	28.315	0.0338	-2.5 to 2.5	Pass
		10	3.85	29.668	0.0355	-2.5 to 2.5	Pass
		30	3.85	28.927	0.0346	-2.5 to 2.5	Pass
		40	3.85	30.169	0.0361	-2.5 to 2.5	Pass
		50	3.85	29.340	0.0351	-2.5 to 2.5	Pass
	848.8	20	3.27	30.410	0.0358	-2.5 to 2.5	Pass
			3.85	27.297	0.0322	-2.5 to 2.5	Pass
			4.43	30.380	0.0358	-2.5 to 2.5	Pass
		-30	3.85	29.932	0.0353	-2.5 to 2.5	Pass
		-20	3.85	30.027	0.0354	-2.5 to 2.5	Pass
		-10	3.85	28.700	0.0338	-2.5 to 2.5	Pass
		0	3.85	28.173	0.0332	-2.5 to 2.5	Pass
		10	3.85	29.373	0.0346	-2.5 to 2.5	Pass
		30	3.85	28.468	0.0335	-2.5 to 2.5	Pass
		40	3.85	29.001	0.0342	-2.5 to 2.5	Pass
		50	3.85	27.850	0.0328	-2.5 to 2.5	Pass

## 2. Frequency Stability

### 2.1 PCS1900

#### 2.1.1 Test Result

Band: PCS1900							
Network	Frequency (MHz)	Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
					Result	Limit	
GPRS	1850.2	20	3.27	25.548	0.0138	-2.5 to 2.5	Pass
			3.85	28.317	0.0153	-2.5 to 2.5	Pass
			4.43	19.981	0.0108	-2.5 to 2.5	Pass
		-30	3.85	24.284	0.0131	-2.5 to 2.5	Pass
		-20	3.85	21.232	0.0115	-2.5 to 2.5	Pass
		-10	3.85	26.227	0.0142	-2.5 to 2.5	Pass
		0	3.85	22.604	0.0122	-2.5 to 2.5	Pass
		10	3.85	24.088	0.0130	-2.5 to 2.5	Pass
		30	3.85	21.369	0.0115	-2.5 to 2.5	Pass
		40	3.85	21.454	0.0116	-2.5 to 2.5	Pass
		50	3.85	21.479	0.0116	-2.5 to 2.5	Pass
	1880	20	3.27	22.940	0.0122	-2.5 to 2.5	Pass
			3.85	24.599	0.0131	-2.5 to 2.5	Pass
			4.43	22.607	0.0120	-2.5 to 2.5	Pass
		-30	3.85	21.479	0.0114	-2.5 to 2.5	Pass
		-20	3.85	23.824	0.0127	-2.5 to 2.5	Pass
		-10	3.85	22.659	0.0121	-2.5 to 2.5	Pass
		0	3.85	19.269	0.0102	-2.5 to 2.5	Pass
		10	3.85	21.060	0.0112	-2.5 to 2.5	Pass
		30	3.85	22.297	0.0119	-2.5 to 2.5	Pass
		40	3.85	22.271	0.0118	-2.5 to 2.5	Pass
		50	3.85	24.271	0.0129	-2.5 to 2.5	Pass
	1909.8	20	3.27	25.014	0.0131	-2.5 to 2.5	Pass
			3.85	21.579	0.0113	-2.5 to 2.5	Pass
			4.43	22.420	0.0117	-2.5 to 2.5	Pass
		-30	3.85	26.880	0.0141	-2.5 to 2.5	Pass
		-20	3.85	20.158	0.0106	-2.5 to 2.5	Pass
		-10	3.85	24.145	0.0126	-2.5 to 2.5	Pass
		0	3.85	20.539	0.0108	-2.5 to 2.5	Pass

		10	3.85	28.172	0.0148	-2.5 to 2.5	Pass
		30	3.85	24.835	0.0130	-2.5 to 2.5	Pass
		40	3.85	18.029	0.0094	-2.5 to 2.5	Pass
		50	3.85	26.789	0.0140	-2.5 to 2.5	Pass
EGPRS	1850.2	20	3.27	19.409	0.0105	-2.5 to 2.5	Pass
			3.85	24.018	0.0130	-2.5 to 2.5	Pass
			4.43	20.935	0.0113	-2.5 to 2.5	Pass
		-30	3.85	23.996	0.0130	-2.5 to 2.5	Pass
		-20	3.85	20.840	0.0113	-2.5 to 2.5	Pass
		-10	3.85	18.976	0.0103	-2.5 to 2.5	Pass
		0	3.85	19.264	0.0104	-2.5 to 2.5	Pass
		10	3.85	25.393	0.0137	-2.5 to 2.5	Pass
		30	3.85	22.047	0.0119	-2.5 to 2.5	Pass
		40	3.85	24.931	0.0135	-2.5 to 2.5	Pass
		50	3.85	23.672	0.0128	-2.5 to 2.5	Pass
	1880	20	3.27	21.253	0.0113	-2.5 to 2.5	Pass
			3.85	19.585	0.0104	-2.5 to 2.5	Pass
			4.43	21.542	0.0115	-2.5 to 2.5	Pass
		-30	3.85	22.160	0.0118	-2.5 to 2.5	Pass
		-20	3.85	21.862	0.0116	-2.5 to 2.5	Pass
		-10	3.85	20.850	0.0111	-2.5 to 2.5	Pass
		0	3.85	19.965	0.0106	-2.5 to 2.5	Pass
		10	3.85	16.778	0.0089	-2.5 to 2.5	Pass
		30	3.85	21.190	0.0113	-2.5 to 2.5	Pass
		40	3.85	18.624	0.0099	-2.5 to 2.5	Pass
		50	3.85	18.694	0.0099	-2.5 to 2.5	Pass
	1909.8	20	3.27	20.907	0.0109	-2.5 to 2.5	Pass
			3.85	21.618	0.0113	-2.5 to 2.5	Pass
			4.43	23.534	0.0123	-2.5 to 2.5	Pass
		-30	3.85	20.559	0.0108	-2.5 to 2.5	Pass
		-20	3.85	25.447	0.0133	-2.5 to 2.5	Pass
		-10	3.85	18.482	0.0097	-2.5 to 2.5	Pass
		0	3.85	17.148	0.0090	-2.5 to 2.5	Pass
		10	3.85	24.640	0.0129	-2.5 to 2.5	Pass
		30	3.85	16.612	0.0087	-2.5 to 2.5	Pass
		40	3.85	23.650	0.0124	-2.5 to 2.5	Pass
		50	3.85	15.636	0.0082	-2.5 to 2.5	Pass