

# 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	3.3	-4.229	-0.0051	-2.5 to 2.5	Pass
			3.6	-2.518	-0.0031	-2.5 to 2.5	Pass
			4.2	-9.363	-0.0114	-2.5 to 2.5	Pass
		-30	3.6	-4.359	-0.0053	-2.5 to 2.5	Pass
		-20	3.6	-6.360	-0.0077	-2.5 to 2.5	Pass
		-10	3.6	-9.072	-0.0110	-2.5 to 2.5	Pass
		0	3.6	-3.777	-0.0046	-2.5 to 2.5	Pass
		10	3.6	-5.650	-0.0069	-2.5 to 2.5	Pass
		30	3.6	-2.744	-0.0033	-2.5 to 2.5	Pass
		40	3.6	-8.782	-0.0107	-2.5 to 2.5	Pass
	50	3.6	-6.457	-0.0078	-2.5 to 2.5	Pass	
	836.6	20	3.3	-5.876	-0.0070	-2.5 to 2.5	Pass
			3.6	-5.456	-0.0065	-2.5 to 2.5	Pass
			4.2	-7.781	-0.0093	-2.5 to 2.5	Pass
		-30	3.6	-7.749	-0.0093	-2.5 to 2.5	Pass
		-20	3.6	-6.715	-0.0080	-2.5 to 2.5	Pass
		-10	3.6	-4.520	-0.0054	-2.5 to 2.5	Pass
		0	3.6	-5.747	-0.0069	-2.5 to 2.5	Pass
		10	3.6	-2.228	-0.0027	-2.5 to 2.5	Pass
		30	3.6	-6.393	-0.0076	-2.5 to 2.5	Pass
		40	3.6	-5.101	-0.0061	-2.5 to 2.5	Pass
	50	3.6	-10.654	-0.0127	-2.5 to 2.5	Pass	
	848.8	20	3.3	-1.711	-0.0020	-2.5 to 2.5	Pass
			3.6	-4.552	-0.0054	-2.5 to 2.5	Pass
			4.2	-6.909	-0.0081	-2.5 to 2.5	Pass
		-30	3.6	-6.457	-0.0076	-2.5 to 2.5	Pass
		-20	3.6	-3.455	-0.0041	-2.5 to 2.5	Pass
		-10	3.6	-7.619	-0.0090	-2.5 to 2.5	Pass
		0	3.6	-0.904	-0.0011	-2.5 to 2.5	Pass
		10	3.6	-14.173	-0.0167	-2.5 to 2.5	Pass
30		3.6	-14.077	-0.0166	-2.5 to 2.5	Pass	
40		3.6	-10.687	-0.0126	-2.5 to 2.5	Pass	
50	3.6	-14.303	-0.0169	-2.5 to 2.5	Pass		
EGPRS	824.2	20	3.3	-11.687	-0.0142	-2.5 to 2.5	Pass
			3.6	-15.497	-0.0188	-2.5 to 2.5	Pass
			4.2	-17.079	-0.0207	-2.5 to 2.5	Pass
		-30	3.6	-8.782	-0.0107	-2.5 to 2.5	Pass
		-20	3.6	-14.109	-0.0171	-2.5 to 2.5	Pass
		-10	3.6	-13.528	-0.0164	-2.5 to 2.5	Pass
		0	3.6	-10.557	-0.0128	-2.5 to 2.5	Pass
		10	3.6	-15.659	-0.0190	-2.5 to 2.5	Pass
		30	3.6	-13.495	-0.0164	-2.5 to 2.5	Pass
		40	3.6	-19.824	-0.0241	-2.5 to 2.5	Pass
	50	3.6	-13.560	-0.0165	-2.5 to 2.5	Pass	
	836.6	20	3.3	-6.780	-0.0081	-2.5 to 2.5	Pass
			3.6	-13.173	-0.0157	-2.5 to 2.5	Pass

			4.2	-17.241	-0.0206	-2.5 to 2.5	Pass	
		-30	3.6	-12.624	-0.0151	-2.5 to 2.5	Pass	
		-20	3.6	-13.754	-0.0164	-2.5 to 2.5	Pass	
		-10	3.6	-10.235	-0.0122	-2.5 to 2.5	Pass	
		0	3.6	-10.235	-0.0122	-2.5 to 2.5	Pass	
		10	3.6	-18.468	-0.0221	-2.5 to 2.5	Pass	
		30	3.6	-18.306	-0.0219	-2.5 to 2.5	Pass	
		40	3.6	-18.371	-0.0220	-2.5 to 2.5	Pass	
		50	3.6	-19.533	-0.0233	-2.5 to 2.5	Pass	
	848.8	20	3.3	-16.982	-0.0200	-2.5 to 2.5	Pass	
			3.6	-11.558	-0.0136	-2.5 to 2.5	Pass	
			4.2	-12.107	-0.0143	-2.5 to 2.5	Pass	
			-30	3.6	-9.718	-0.0114	-2.5 to 2.5	Pass
			-20	3.6	-13.205	-0.0156	-2.5 to 2.5	Pass
			-10	3.6	-18.532	-0.0218	-2.5 to 2.5	Pass
			0	3.6	-7.716	-0.0091	-2.5 to 2.5	Pass
			10	3.6	-14.658	-0.0173	-2.5 to 2.5	Pass
			30	3.6	-10.816	-0.0127	-2.5 to 2.5	Pass
			40	3.6	-10.235	-0.0121	-2.5 to 2.5	Pass
			50	3.6	-14.173	-0.0167	-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	3.3	-5.521	-0.0030	-2.5 to 2.5	Pass
			3.6	-3.777	-0.0020	-2.5 to 2.5	Pass
			4.2	-12.656	-0.0068	-2.5 to 2.5	Pass
		-30	3.6	-14.496	-0.0078	-2.5 to 2.5	Pass
		-20	3.6	-17.079	-0.0092	-2.5 to 2.5	Pass
		-10	3.6	-12.010	-0.0065	-2.5 to 2.5	Pass
		0	3.6	-21.922	-0.0118	-2.5 to 2.5	Pass
		10	3.6	-19.016	-0.0103	-2.5 to 2.5	Pass
		30	3.6	-21.341	-0.0115	-2.5 to 2.5	Pass
		40	3.6	-14.722	-0.0080	-2.5 to 2.5	Pass
	50	3.6	-10.751	-0.0058	-2.5 to 2.5	Pass	
	1880	20	3.3	-0.872	-0.0005	-2.5 to 2.5	Pass
			3.6	-5.069	-0.0027	-2.5 to 2.5	Pass
			4.2	-1.776	-0.0009	-2.5 to 2.5	Pass
		-30	3.6	-14.916	-0.0079	-2.5 to 2.5	Pass
		-20	3.6	-16.078	-0.0086	-2.5 to 2.5	Pass
		-10	3.6	-13.302	-0.0071	-2.5 to 2.5	Pass
		0	3.6	-14.981	-0.0080	-2.5 to 2.5	Pass
		10	3.6	-23.310	-0.0124	-2.5 to 2.5	Pass
		30	3.6	-14.077	-0.0075	-2.5 to 2.5	Pass
		40	3.6	-16.208	-0.0086	-2.5 to 2.5	Pass
	50	3.6	-21.922	-0.0117	-2.5 to 2.5	Pass	
	1909.8	20	3.3	-8.265	-0.0043	-2.5 to 2.5	Pass
			3.6	-7.264	-0.0038	-2.5 to 2.5	Pass
			4.2	-5.037	-0.0026	-2.5 to 2.5	Pass
		-30	3.6	-13.463	-0.0070	-2.5 to 2.5	Pass
		-20	3.6	-4.488	-0.0023	-2.5 to 2.5	Pass
		-10	3.6	-5.908	-0.0031	-2.5 to 2.5	Pass
		0	3.6	-15.755	-0.0082	-2.5 to 2.5	Pass
		10	3.6	-7.426	-0.0039	-2.5 to 2.5	Pass
30		3.6	-12.656	-0.0066	-2.5 to 2.5	Pass	
40		3.6	-19.598	-0.0103	-2.5 to 2.5	Pass	
50	3.6	-8.911	-0.0047	-2.5 to 2.5	Pass		
EGPRS	1850.2	20	3.3	-18.920	-0.0102	-2.5 to 2.5	Pass
			3.6	-17.338	-0.0094	-2.5 to 2.5	Pass
			4.2	-17.854	-0.0096	-2.5 to 2.5	Pass
		-30	3.6	-20.760	-0.0112	-2.5 to 2.5	Pass
		-20	3.6	-20.889	-0.0113	-2.5 to 2.5	Pass
		-10	3.6	-19.630	-0.0106	-2.5 to 2.5	Pass
		0	3.6	-24.150	-0.0131	-2.5 to 2.5	Pass
		10	3.6	-17.596	-0.0095	-2.5 to 2.5	Pass
		30	3.6	-12.688	-0.0069	-2.5 to 2.5	Pass
		40	3.6	-23.440	-0.0127	-2.5 to 2.5	Pass
50	3.6	-12.495	-0.0068	-2.5 to 2.5	Pass		

	1880	20	3.3	-12.107	-0.0064	-2.5 to 2.5	Pass
			3.6	-13.980	-0.0074	-2.5 to 2.5	Pass
			4.2	-17.047	-0.0091	-2.5 to 2.5	Pass
		-30	3.6	-17.531	-0.0093	-2.5 to 2.5	Pass
		-20	3.6	-17.144	-0.0091	-2.5 to 2.5	Pass
		-10	3.6	-8.491	-0.0045	-2.5 to 2.5	Pass
		0	3.6	-15.562	-0.0083	-2.5 to 2.5	Pass
		10	3.6	-13.818	-0.0074	-2.5 to 2.5	Pass
		30	3.6	-19.436	-0.0103	-2.5 to 2.5	Pass
		40	3.6	-8.168	-0.0043	-2.5 to 2.5	Pass
	50	3.6	-16.369	-0.0087	-2.5 to 2.5	Pass	
	1909.8	20	3.3	-21.987	-0.0115	-2.5 to 2.5	Pass
			3.6	-21.309	-0.0112	-2.5 to 2.5	Pass
			4.2	-32.544	-0.0170	-2.5 to 2.5	Pass
		-30	3.6	-23.859	-0.0125	-2.5 to 2.5	Pass
		-20	3.6	-27.120	-0.0142	-2.5 to 2.5	Pass
		-10	3.6	-27.475	-0.0144	-2.5 to 2.5	Pass
		0	3.6	-19.727	-0.0103	-2.5 to 2.5	Pass
		10	3.6	-10.913	-0.0057	-2.5 to 2.5	Pass
		30	3.6	-11.978	-0.0063	-2.5 to 2.5	Pass
40		3.6	-13.140	-0.0069	-2.5 to 2.5	Pass	
50	3.6	-15.400	-0.0081	-2.5 to 2.5	Pass		