

E5071C-20B

S E R V I C E N O T ESupersedes:
E5071C-20A

E5071C ENA Series Network Analyzer, 9 kHz to 20 GHz

Serial Numbers: See the attached at the end of this service note

The measurement data is unstable due to a Receiver Port degradation, though a user performs calibration.**Parts Required:**

P/N	Description	Qty.
E5071-62582	TESTED RECEIVER MODULE (WITHOUT BIAS TEE)	2 to 4
or		
E5071-62592	TESTED RECEIVER MODULE (WITH BIAS TEE)	2 to 4
or		
E5071-62397	TESTED RECEIVER MODULE	2 to 4

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
MODIFICATION RECOMMENDED INTERNAL ONLY DOCUMENT			
ACTION CATEGORY: ☒ ON SPECIFIED FAILURE ☐ AGREEABLE TIME		STANDARDS LABOR: 3.6 Hours	
LOCATION CATEGORY: ☐ CUSTOMER INSTALLABLE ☒ ON-SITE (active On-site coverage only) ☒ SERVICE CENTER ☐ CHANNEL PARTNER		SERVICE INVENTORY: ☐ RETURN ☐ SCRAP ☐ SEE TEXT	USED PARTS: ☒ RETURN ☐ SCRAP ☐ SEE TEXT
AVAILABILITY: PRODUCT'S SUPPORT LIFE		NO CHARGE AVAILABLE UNTIL: Feb, 2016	
☒ Calibration Required ☐ Calibration NOT Required		PRODUCT LINE: WN AUTHOR: jm	
ADDITIONAL INFORMATION: E5071C-20A Note: Mixer-IC diagnostic Test program is revised to isolate the Mixer-IC failure more precisely. Use the Mixer-IC diagnostic Test A.04.00 or later. RDT (FD) Mixer-IC test is not revised yet as of Feb-2013.			

© AGILENT TECHNOLOGIES, INC. 2013
PRINTED IN U.S.A.

September 24, 2013

Rev. 01

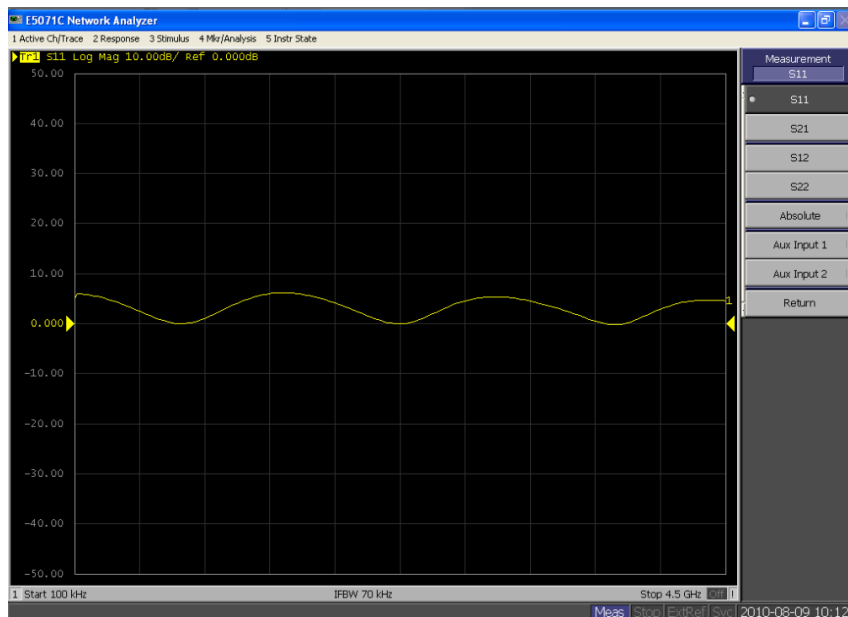


Page 1 of 17

Situation:

(1) Customer complains about the measurement data is not stable shortly after user calibration is performed.

(2) Port-1 S11, Port-2 S22, Port-3 S33 or Port-4 S44 has trace distortion as shown as in below picture due to Mixer-IC infant transistor failure, though there is no cable or adapter connected to the port.

**Solution/Action:**

When the above symptom can be identified without connecting a cable or adapter to a port, then run the Mixer-IC diagnostic Test **before performing Adjustment** and if a Port results in FAIL, then replace all the receiver boards

On any of Port failure,

then replace failed port(s) with new receiver board(s) and

replace pass port(s) with new receiver board(s) when pass port is E5071-62082/69082/62182/69182/62092/69092/62192/69192/62087/69087/62097/69097.

The new Mixer-IC diagnostic Test program can be retrieved from the below URL.

(Agilent Internal) http://kobemktg.jpn.agilent.com/field_eng/service/faq/e5071c.htm

4. Use [the Mixer-ic diagnostic program](#).

Note: Mixer-IC diagnostic Test program is revised to isolate the Mixer-IC failure more precisely.

Use the Mixer-IC diagnostic Test **A.04.00** or later.

RDT (FD) Mixer-IC test is not revised yet as of Feb-2013.

Step-1. Run the Mixer-IC diagnostic Test program, **before performing Adjustment**.

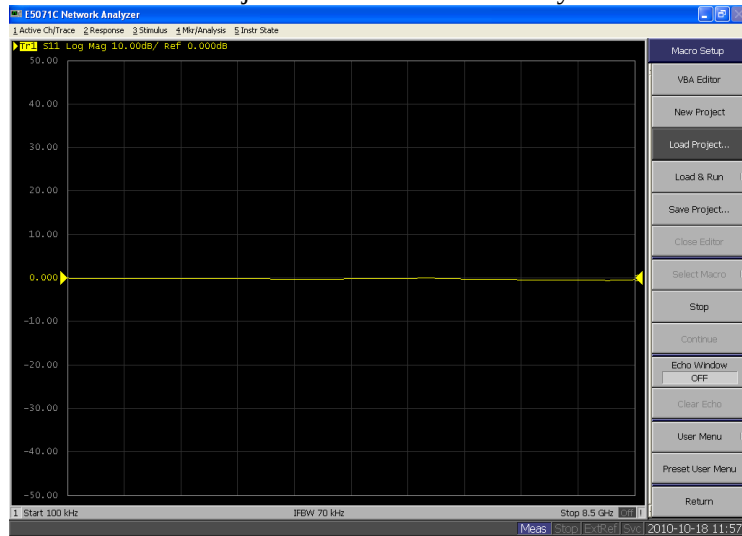
1-1. Store Mixer-IC diagnostic program to USB pen drive which is scanned by Anti-Virus software.

1-2. Power on the E5071C and perform heat-run with 90 minutes.

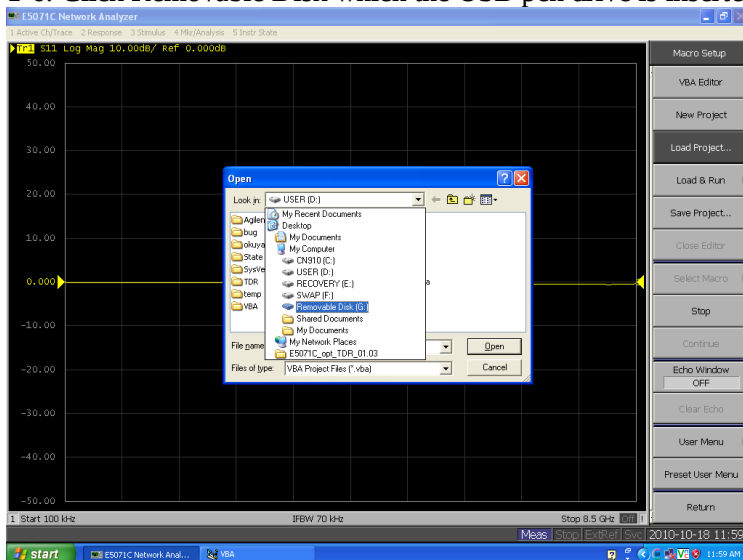
1-3. Insert USB pen drive to the E5071C.

1-4. Push Macro Setup on the E5071C hard-key.

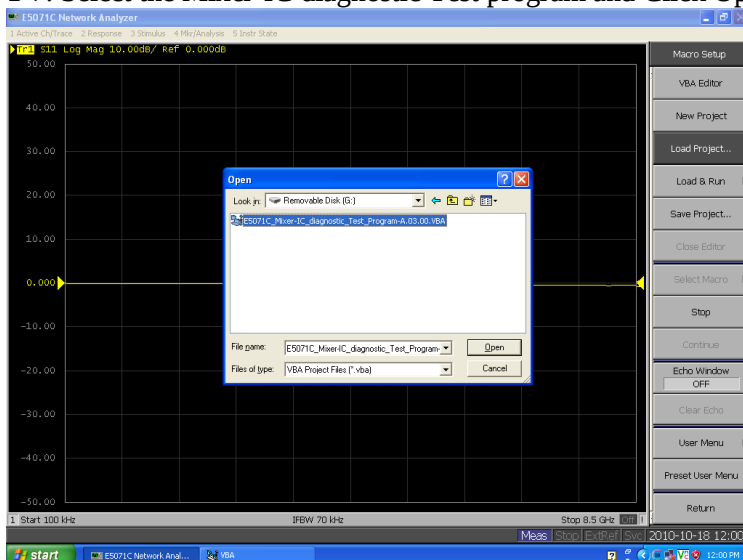
1-5. Click Load Project on the E5071C soft-key.



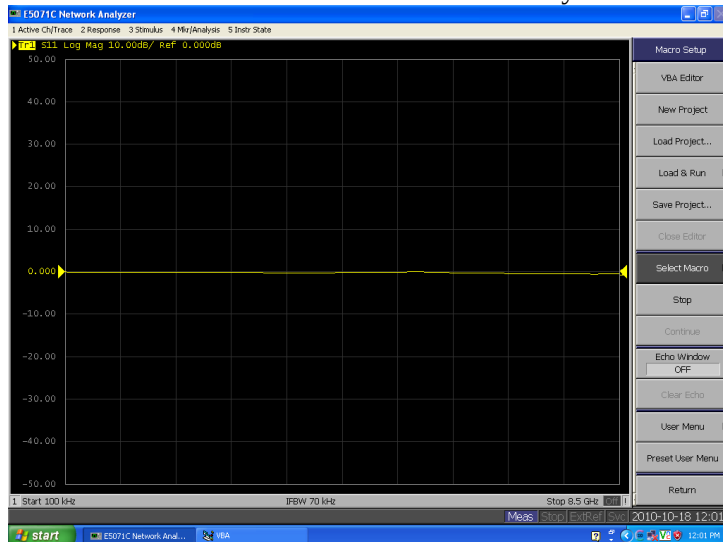
1-6. Click Removable Disk which the USB pen drive is inserted in.



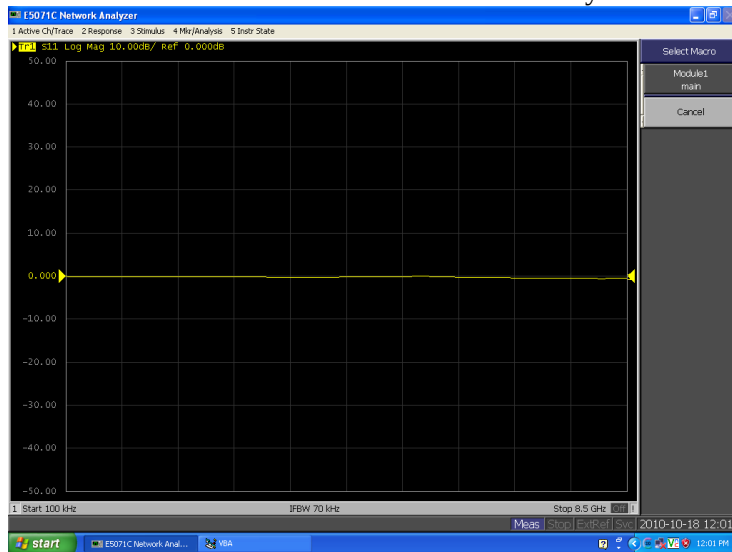
1-7. Select the Mixer-IC diagnostic Test program and Click Open button.



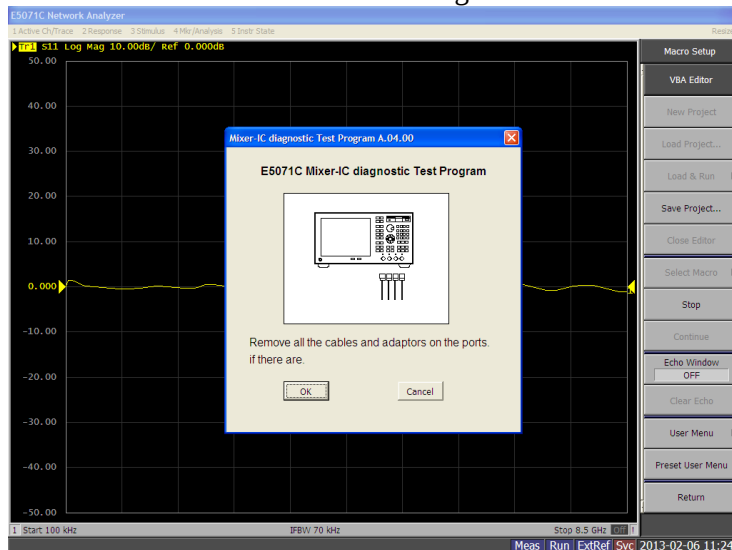
1-8. Click Select Macro on the E5071C soft-key.



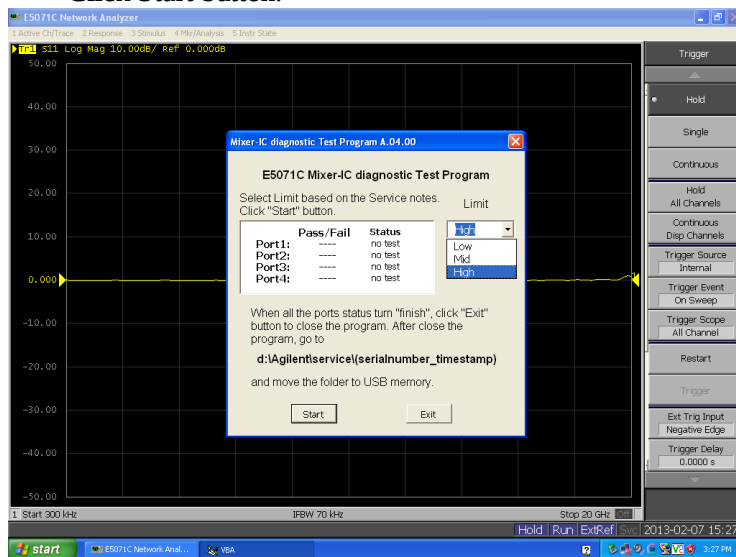
1-9. Click Module 1 main on the E5071C soft-key.



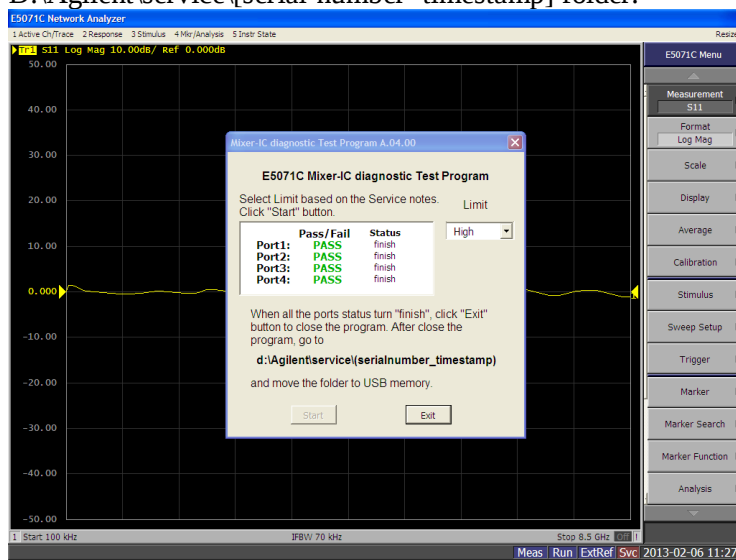
1-10. Remove all the cables and adaptors on the ports, if there are and Click OK button after confirming it.



- 1-11. **Select High on Limit (for Service Note E5071C-20A serial-numbers)**
Click Start button.

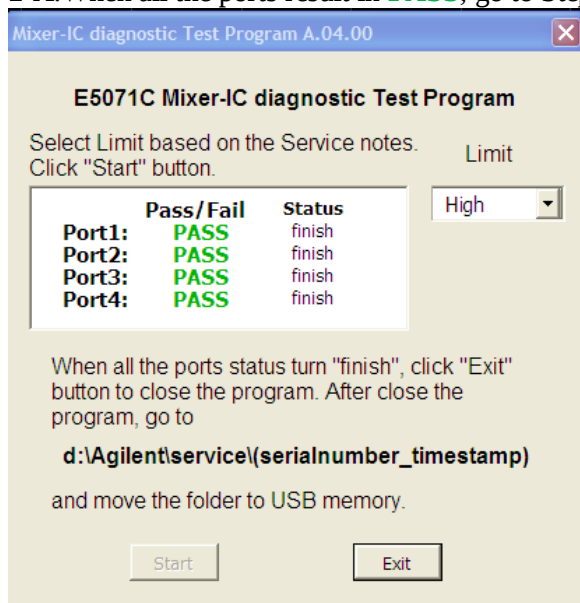


- 1-12. Take note all the ports status and Click Exit button. (This result is also stored on D:\Agilent\service\[serial-number+timestamp] folder).

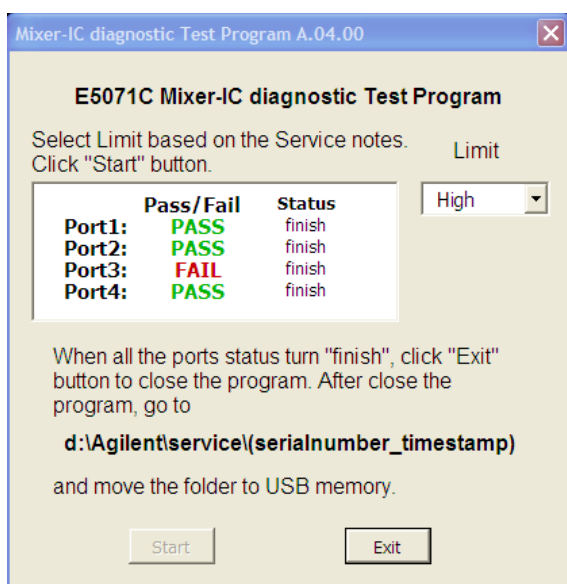


Step-2. By checking the Pass/Fail result, take following actions.

2-A. When all the ports result in **PASS**, go to Step-3 and Step-4.



2-B. When either of the port results in **FAIL**, replace all the ports with new receiver boards.

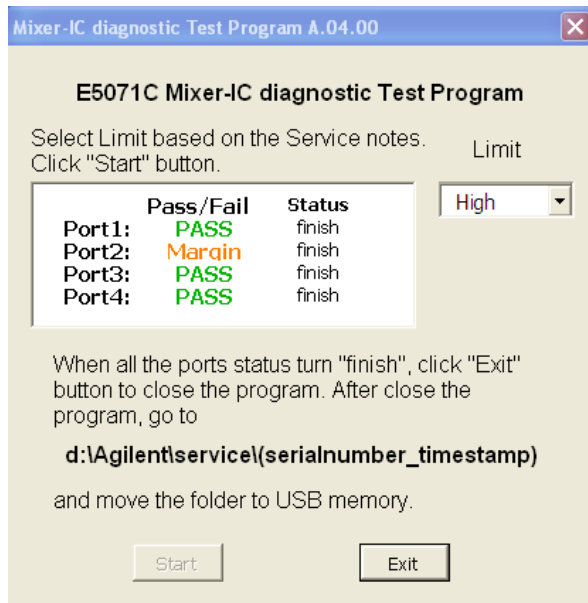


2-B-1. Replace the receiver board. (See the E5071C Service Guide for more details)

2-B-2. After the replacement, perform Post-Repair procedures. (See the E5071C Service Guide for more details)

2-C. When either of the port results in **Marginal FAIL**, segregate the root cause whether it's due to bridge or not. If the Marginal FAIL port is not due to Bridge failure, Agilent considers it as Mixer-IC failure. Marginal FAIL is only shown on Option 2D5/2K5/4D5/4K5.

(See Appendix [How to segregate the Bridge failure at marginal FAIL](#) for more details)



2-C-1. When the Marginal FAIL port is due to Mixer-IC failure, replace the receiver boards. (See the E5071C Service Guide for more details)

2-C-2. After the replacement, perform Post-Repair procedures. (See the E5071C Service Guide for more details)

Step-3. Store the Mixer-IC diagnostic test result to Siebel attachment.

3-1. Go to D:\Agilent\service\ directory,
Cut [serial-number+timestamp] folder and
Paste the folder to the Removable Disk.

3-2. Disconnect USB pen drive from the E5071C.

3-3. ZIP the [serial-number+timestamp] folder on the USB pen drive and put it to Siebel attachment.

Step-4. Remove the Mixer-IC Diagnostic Test program from the E5071C.

Appendix

How to segregate the Bridge failure at Marginal FAIL

(1) Target module

E5071-62089 POWER SPLITTER & BIAS TEE MODULE

(2) Required instrument

E5071C Network Analyzer (8.5GHz)

3.5mm Calibration kit

Female 3.5mm – female 3.5mm adaptor (SMA adaptor is also applicable)

SMA cable (e.g. 5062-6685)

(3) Procedure

Set network analyzer as below.

Start frequency : 100kHz

Stop frequency : 8.5GHz

Sweep type : Linear frequency

Sweep mode : stepped

Power : 0dBm

Number of point : 201

IF bandwidth : 1kHz

Connect SMA cable to port 1 and port 2 of network analyzer.

Make full 2-port calibration on port 1 and 2.

Connect bridge connectors as below.

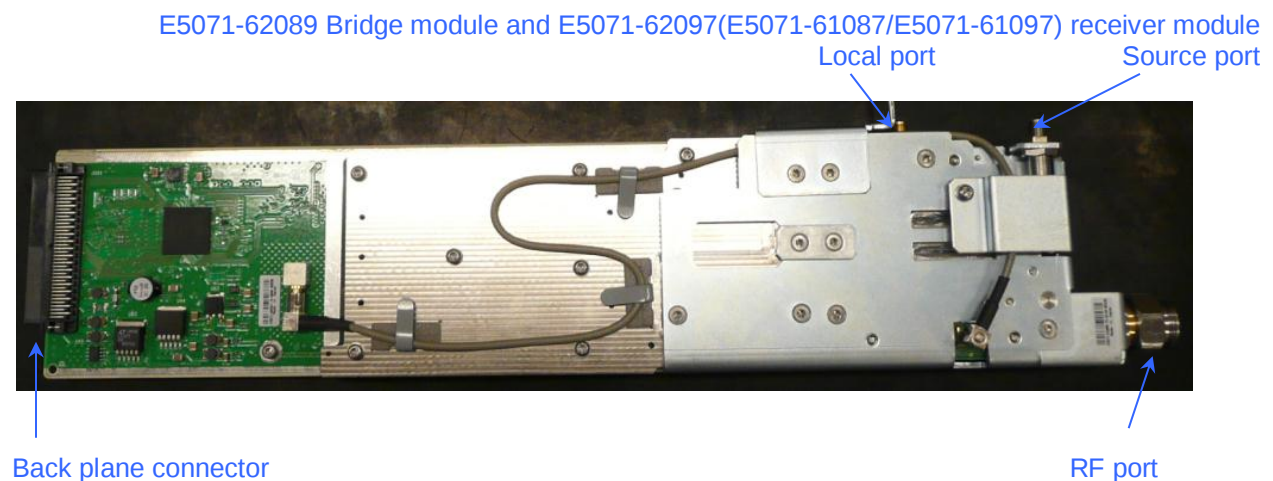
Receiver Source port to port 1 of network analyzer.

Receiver RF port to port 2 of network analyzer.

Receiver Local port and backplane connector need no connection.

Measure S21.

(4) Bridge Module Port Location

Fig 1. Bridge module port location

(5) Example of Measurement

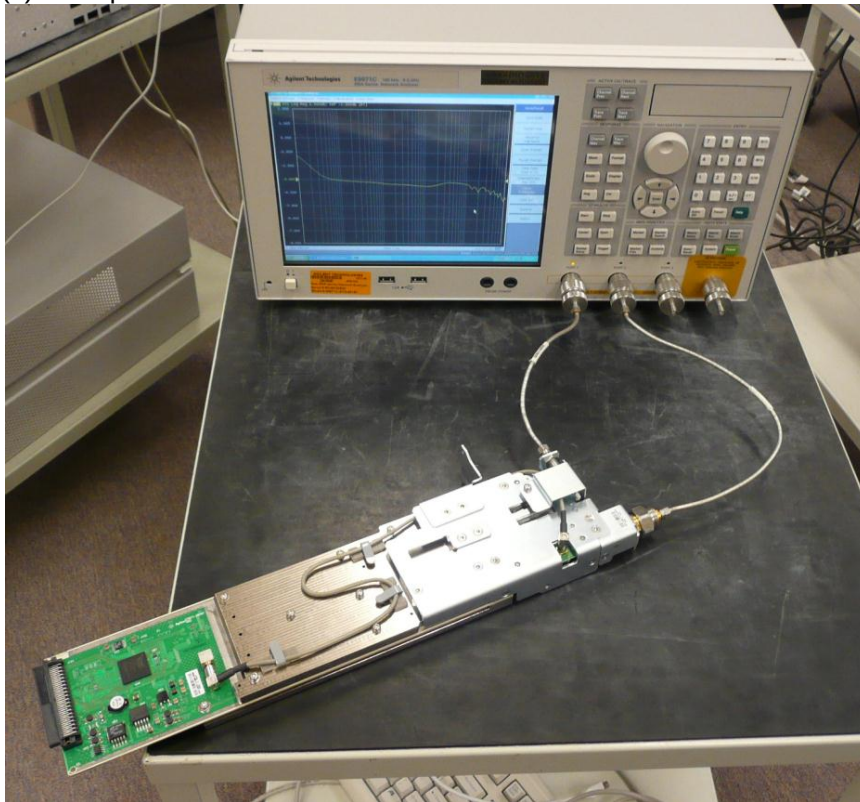
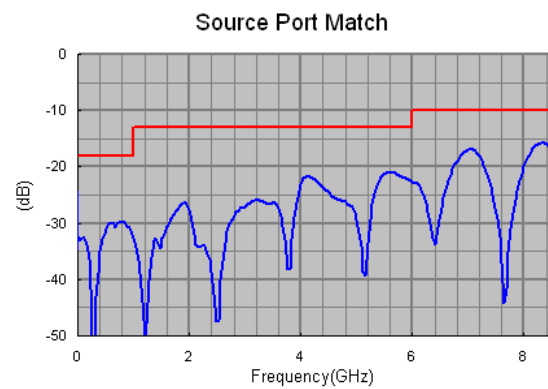
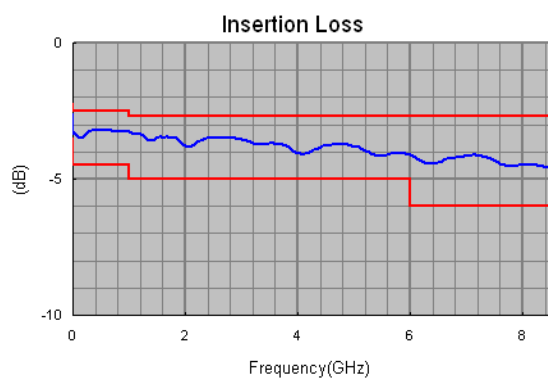


Fig 2. Measurement setup



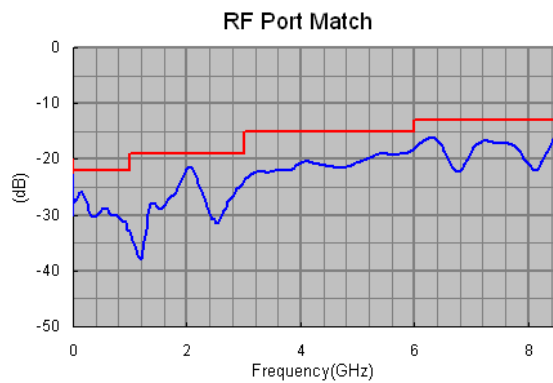


Fig 3. Example of measurement data

(6) Test Limit

S21 Bridge Insertion Loss

300kHz to 1MHz	-3.5dB to -2.2dB
1MHz to 1GHz	-4.5dB to -2.5dB
1GHz to 6GHz	-5.0dB to -2.7dB
6GHz to 8.5GHz	-6.0dB to -2.7dB

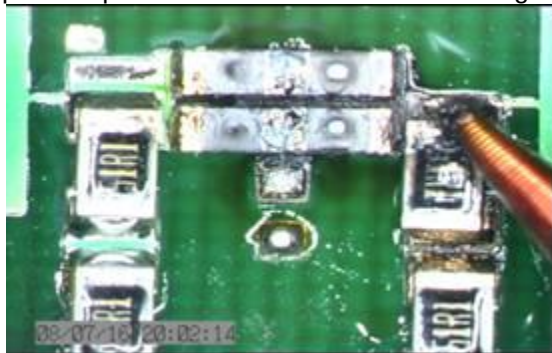
S11 Source Port Return Loss

300kHz to 1GHz	-18dB
1GHz to 6GHz	-13dB
6GHz to 8.5GHz	-10dB

S22 RF Port Return Loss

300kHz to 1MHz	-20dB
1MHz to 10MHz	-23dB
10MHz to 1GHz	-22dB
1GHz to 3GHz	-19dB
3GHz to 6GHz	-15dB
6GHz to 8.5GHz	-13dB

When Bridge Insertion Loss limit, Source Port Return Loss Limit or RF Port Return Loss is out of limit, please open the chassis and check the bridge circuit visually.



Note: When the bridge failure is shown, EOS(Excessive Over Stress) by customer is highly suspected. For this case, this service note is NOT applied.

Serial numbers:

MY46100104	MY46100978	MY46101788	MY46103190	MY46103510	MY46103733	MY46103902	MY46104643
MY46100134	MY46100979	MY46101789	MY46103191	MY46103511	MY46103734	MY46103904	MY46104644
MY46100361	MY46100980	MY46101790	MY46103204	MY46103512	MY46103735	MY46103905	MY46104645
MY46100363	MY46100982	MY46101791	MY46103291	MY46103513	MY46103737	MY46103906	MY46104646
MY46100414	MY46100999	MY46101792	MY46103292	MY46103514	MY46103738	MY46103907	MY46104647
MY46100427	MY46101002	MY46101793	MY46103293	MY46103515	MY46103739	MY46103908	MY46104648
MY46100461	MY46101005	MY46101794	MY46103296	MY46103516	MY46103740	MY46103909	MY46104649
MY46100586	MY46101106	MY46101845	MY46103298	MY46103517	MY46103741	MY46103910	MY46104650
MY46100593	MY46101107	MY46101852	MY46103300	MY46103518	MY46103742	MY46103911	MY46104651
MY46100608	MY46101108	MY46101855	MY46103301	MY46103519	MY46103743	MY46103912	MY46104652
MY46100845	MY46101113	MY46101856	MY46103302	MY46103544	MY46103744	MY46103913	MY46104653
MY46100859	MY46101115	MY46101878	MY46103303	MY46103553	MY46103745	MY46103917	MY46104654
MY46100868	MY46101117	MY46101954	MY46103304	MY46103554	MY46103746	MY46103921	MY46104655
MY46100897	MY46101118	MY46101969	MY46103319	MY46103555	MY46103747	MY46103922	MY46104658
MY46100903	MY46101119	MY46101980	MY46103320	MY46103556	MY46103748	MY46103923	MY46104660
MY46100906	MY46101120	MY46102300	MY46103321	MY46103557	MY46103749	MY46103924	MY46104662
MY46100907	MY46101121	MY46102460	MY46103322	MY46103558	MY46103750	MY46103925	MY46104663
MY46100909	MY46101122	MY46102461	MY46103327	MY46103559	MY46103751	MY46103926	MY46104664
MY46100911	MY46101123	MY46102501	MY46103331	MY46103560	MY46103752	MY46103945	MY46104665
MY46100913	MY46101124	MY46102509	MY46103332	MY46103561	MY46103753	MY46103997	MY46104666
MY46100914	MY46101125	MY46102510	MY46103333	MY46103562	MY46103754	MY46103998	MY46104667
MY46100920	MY46101126	MY46102511	MY46103369	MY46103563	MY46103755	MY46104017	MY46104668
MY46100921	MY46101127	MY46102512	MY46103426	MY46103564	MY46103756	MY46104068	MY46104669
MY46100949	MY46101128	MY46102525	MY46103435	MY46103565	MY46103799	MY46104390	MY46104670
MY46100954	MY46101129	MY46102526	MY46103488	MY46103566	MY46103845	MY46104459	MY46104671
MY46100955	MY46101147	MY46102536	MY46103489	MY46103577	MY46103887	MY46104460	MY46104672
MY46100956	MY46101193	MY46102537	MY46103490	MY46103578	MY46103888	MY46104461	MY46104673
MY46100958	MY46101231	MY46102538	MY46103491	MY46103579	MY46103889	MY46104462	MY46104674
MY46100964	MY46101264	MY46102539	MY46103492	MY46103580	MY46103890	MY46104463	MY46104675
MY46100967	MY46101339	MY46102540	MY46103493	MY46103581	MY46103891	MY46104464	MY46104676
MY46100968	MY46101350	MY46102541	MY46103494	MY46103597	MY46103892	MY46104465	MY46104677
MY46100969	MY46101358	MY46102542	MY46103495	MY46103598	MY46103893	MY46104466	MY46104678
MY46100970	MY46101364	MY46102652	MY46103503	MY46103599	MY46103894	MY46104467	MY46104679
MY46100971	MY46101476	MY46103057	MY46103504	MY46103600	MY46103895	MY46104468	MY46104680
MY46100972	MY46101648	MY46103067	MY46103505	MY46103628	MY46103896	MY46104469	MY46104681
MY46100973	MY46101733	MY46103072	MY46103506	MY46103729	MY46103897	MY46104470	MY46104682
MY46100975	MY46101742	MY46103148	MY46103507	MY46103730	MY46103898	MY46104636	MY46104683
MY46100976	MY46101743	MY46103187	MY46103508	MY46103731	MY46103899	MY46104641	MY46104684
MY46100977	MY46101787	MY46103189	MY46103509	MY46103732	MY46103900	MY46104642	MY46104685

MY46104686	MY46104731	MY46106179
MY46104687	MY46104732	MY46106262
MY46104688	MY46104733	MY46106273
MY46104689	MY46104734	MY46107065
MY46104690	MY46104736	
MY46104691	MY46104737	
MY46104692	MY46104738	
MY46104693	MY46104740	
MY46104694	MY46104741	
MY46104695	MY46104742	
MY46104696	MY46104745	
MY46104697	MY46104748	
MY46104698	MY46104750	
MY46104699	MY46104752	
MY46104700	MY46104798	
MY46104701	MY46104833	
MY46104702	MY46104859	
MY46104703	MY46104983	
MY46104704	MY46105386	
MY46104705	MY46105395	
MY46104706	MY46105396	
MY46104707	MY46105397	
MY46104708	MY46105398	
MY46104710	MY46105399	
MY46104711	MY46105400	
MY46104712	MY46105401	
MY46104713	MY46105403	
MY46104718	MY46105404	
MY46104719	MY46105427	
MY46104720	MY46105454	
MY46104721	MY46105460	
MY46104722	MY46105463	
MY46104723	MY46105503	
MY46104724	MY46105504	
MY46104725	MY46105511	
MY46104726	MY46105515	
MY46104728	MY46105516	
MY46104729	MY46105522	
MY46104730	MY46105523	

Add serial-numbers on E5071C-20A

MY46100121	MY46100683	MY46101044	MY46101578	MY46102234	MY46102589	MY46103183	MY46103980
MY46100122	MY46100689	MY46101045	MY46101583	MY46102235	MY46102603	MY46103186	MY46103982
MY46100126	MY46100690	MY46101047	MY46101586	MY46102247	MY46102626	MY46103202	MY46104016
MY46100142	MY46100697	MY46101072	MY46101592	MY46102259	MY46102643	MY46103245	MY46104023
MY46100183	MY46100702	MY46101091	MY46101593	MY46102260	MY46102644	MY46103248	MY46104054
MY46100186	MY46100710	MY46101100	MY46101596	MY46102352	MY46102653	MY46103257	MY46104056
MY46100206	MY46100759	MY46101114	MY46101603	MY46102354	MY46102757	MY46103258	MY46104057
MY46100228	MY46100765	MY46101141	MY46101604	MY46102357	MY46102776	MY46103259	MY46104062
MY46100229	MY46100770	MY46101157	MY46101605	MY46102358	MY46102777	MY46103260	MY46104063
MY46100268	MY46100771	MY46101181	MY46101616	MY46102359	MY46102784	MY46103261	MY46104064
MY46100269	MY46100785	MY46101187	MY46101621	MY46102360	MY46102798	MY46103262	MY46104065
MY46100270	MY46100795	MY46101194	MY46101644	MY46102361	MY46102799	MY46103263	MY46104066
MY46100289	MY46100808	MY46101197	MY46101661	MY46102362	MY46102800	MY46103264	MY46104067
MY46100318	MY46100814	MY46101200	MY46101662	MY46102363	MY46102801	MY46103265	MY46104069
MY46100319	MY46100818	MY46101204	MY46101663	MY46102364	MY46102802	MY46103266	MY46104070
MY46100320	MY46100823	MY46101205	MY46101666	MY46102365	MY46102808	MY46103267	MY46104072
MY46100321	MY46100824	MY46101206	MY46101669	MY46102366	MY46102822	MY46103268	MY46104087
MY46100322	MY46100848	MY46101215	MY46101676	MY46102376	MY46102823	MY46103269	MY46104088
MY46100323	MY46100851	MY46101217	MY46101678	MY46102381	MY46102824	MY46103270	MY46104089
MY46100325	MY46100879	MY46101218	MY46101679	MY46102382	MY46102846	MY46103272	MY46104090
MY46100326	MY46100881	MY46101228	MY46101682	MY46102383	MY46102872	MY46103273	MY46104091
MY46100331	MY46100882	MY46101243	MY46101688	MY46102384	MY46102938	MY46103274	MY46104092
MY46100334	MY46100886	MY46101246	MY46101689	MY46102385	MY46102939	MY46103275	MY46104093
MY46100352	MY46100889	MY46101253	MY46101690	MY46102386	MY46102940	MY46103276	MY46104094
MY46100354	MY46100894	MY46101258	MY46101701	MY46102387	MY46102958	MY46103281	MY46104095
MY46100358	MY46100934	MY46101262	MY46101717	MY46102388	MY46102990	MY46103282	MY46104096
MY46100375	MY46100946	MY46101268	MY46101726	MY46102389	MY46103021	MY46103284	MY46104098
MY46100413	MY46100981	MY46101277	MY46101778	MY46102390	MY46103023	MY46103285	MY46104171
MY46100441	MY46100993	MY46101283	MY46101799	MY46102391	MY46103024	MY46103294	MY46104179
MY46100442	MY46101008	MY46101322	MY46101813	MY46102392	MY46103025	MY46103446	MY46104180
MY46100469	MY46101009	MY46101338	MY46101816	MY46102393	MY46103029	MY46103447	MY46104181
MY46100487	MY46101014	MY46101346	MY46101827	MY46102394	MY46103127	MY46103448	MY46104189
MY46100505	MY46101015	MY46101361	MY46101834	MY46102395	MY46103128	MY46103449	MY46104208
MY46100513	MY46101017	MY46101363	MY46101836	MY46102396	MY46103129	MY46103450	MY46104209
MY46100518	MY46101019	MY46101379	MY46101846	MY46102397	MY46103130	MY46103451	MY46104210
MY46100536	MY46101022	MY46101406	MY46101850	MY46102466	MY46103131	MY46103453	MY46104211
MY46100550	MY46101024	MY46101407	MY46101871	MY46102467	MY46103132	MY46103454	MY46104212
MY46100570	MY46101025	MY46101408	MY46101879	MY46102468	MY46103133	MY46103455	MY46104213
MY46100571	MY46101026	MY46101409	MY46101893	MY46102469	MY46103134	MY46103456	MY46104214
MY46100573	MY46101027	MY46101410	MY46101896	MY46102470	MY46103137	MY46103457	MY46104215
MY46100574	MY46101028	MY46101411	MY46101907	MY46102471	MY46103138	MY46103520	MY46104216
MY46100575	MY46101030	MY46101449	MY46101971	MY46102472	MY46103139	MY46103654	MY46104217
MY46100584	MY46101031	MY46101455	MY46102010	MY46102473	MY46103143	MY46103901	MY46104218
MY46100587	MY46101032	MY46101464	MY46102119	MY46102483	MY46103155	MY46103915	MY46104219
MY46100590	MY46101034	MY46101528	MY46102120	MY46102503	MY46103158	MY46103916	MY46104220
MY46100635	MY46101036	MY46101534	MY46102170	MY46102504	MY46103167	MY46103948	MY46104221
MY46100645	MY46101037	MY46101557	MY46102190	MY46102505	MY46103170	MY46103967	MY46104222
MY46100646	MY46101038	MY46101563	MY46102229	MY46102506	MY46103175	MY46103976	MY46104224
MY46100647	MY46101039	MY46101568	MY46102230	MY46102561	MY46103181	MY46103978	MY46104225
MY46100672	MY46101040	MY46101569	MY46102231	MY46102588	MY46103182	MY46103979	MY46104226

MY46104227	MY46104608	MY46105287	MY46105846	MY46106463	MY46107357	MY46107657	MY46108046
MY46104228	MY46104609	MY46105288	MY46105847	MY46106464	MY46107358	MY46107675	MY46108047
MY46104229	MY46104610	MY46105291	MY46105848	MY46106513	MY46107359	MY46107676	MY46108048
MY46104231	MY46104611	MY46105297	MY46105851	MY46106541	MY46107360	MY46107681	MY46108049
MY46104233	MY46104613	MY46105298	MY46105857	MY46106579	MY46107361	MY46107703	MY46108050
MY46104234	MY46104614	MY46105299	MY46105858	MY46106582	MY46107362	MY46107717	MY46108051
MY46104235	MY46104615	MY46105315	MY46105859	MY46106603	MY46107363	MY46107727	MY46108052
MY46104238	MY46104616	MY46105324	MY46105860	MY46106666	MY46107368	MY46107730	MY46108053
MY46104243	MY46104617	MY46105326	MY46105861	MY46106667	MY46107390	MY46107732	MY46108054
MY46104256	MY46104618	MY46105359	MY46105871	MY46106703	MY46107396	MY46107733	MY46108055
MY46104257	MY46104764	MY46105360	MY46105897	MY46106704	MY46107398	MY46107734	MY46108056
MY46104258	MY46104770	MY46105362	MY46105898	MY46106709	MY46107399	MY46107777	MY46108084
MY46104259	MY46104866	MY46105434	MY46105928	MY46106727	MY46107400	MY46107778	MY46108112
MY46104260	MY46104894	MY46105441	MY46105962	MY46106736	MY46107412	MY46107783	MY46108123
MY46104261	MY46104895	MY46105525	MY46105985	MY46106771	MY46107414	MY46107784	MY46108144
MY46104262	MY46104897	MY46105539	MY46105990	MY46106773	MY46107470	MY46107814	MY46108145
MY46104263	MY46104898	MY46105566	MY46105991	MY46106796	MY46107471	MY46107818	MY46108166
MY46104264	MY46104908	MY46105568	MY46105992	MY46106846	MY46107472	MY46107834	MY46108193
MY46104265	MY46104932	MY46105581	MY46105993	MY46106869	MY46107473	MY46107835	MY46108208
MY46104266	MY46104940	MY46105625	MY46106004	MY46106874	MY46107481	MY46107836	MY46108227
MY46104267	MY46104973	MY46105644	MY46106005	MY46106886	MY46107489	MY46107837	MY46108232
MY46104298	MY46104979	MY46105670	MY46106006	MY46106901	MY46107490	MY46107838	MY46108233
MY46104325	MY46105021	MY46105671	MY46106007	MY46106913	MY46107491	MY46107839	MY46108234
MY46104332	MY46105034	MY46105678	MY46106008	MY46106918	MY46107492	MY46107840	MY46108235
MY46104351	MY46105041	MY46105711	MY46106009	MY46106931	MY46107493	MY46107845	MY46108236
MY46104364	MY46105060	MY46105712	MY46106010	MY46106993	MY46107494	MY46107855	MY46108237
MY46104365	MY46105088	MY46105715	MY46106011	MY46106994	MY46107495	MY46107856	MY46108238
MY46104366	MY46105126	MY46105728	MY46106050	MY46106996	MY46107496	MY46107857	MY46108239
MY46104367	MY46105127	MY46105729	MY46106052	MY46107006	MY46107497	MY46107860	MY46108240
MY46104368	MY46105129	MY46105735	MY46106108	MY46107009	MY46107498	MY46107862	MY46108244
MY46104369	MY46105130	MY46105738	MY46106138	MY46107022	MY46107505	MY46107890	MY46108245
MY46104370	MY46105131	MY46105761	MY46106139	MY46107023	MY46107507	MY46107901	MY46108246
MY46104455	MY46105132	MY46105762	MY46106157	MY46107058	MY46107508	MY46107906	MY46108247
MY46104456	MY46105133	MY46105763	MY46106163	MY46107084	MY46107509	MY46107919	MY46108248
MY46104476	MY46105134	MY46105764	MY46106180	MY46107119	MY46107510	MY46107924	MY46108249
MY46104477	MY46105135	MY46105765	MY46106185	MY46107141	MY46107512	MY46107925	MY46108250
MY46104478	MY46105136	MY46105766	MY46106210	MY46107142	MY46107513	MY46107926	MY46108251
MY46104480	MY46105142	MY46105767	MY46106214	MY46107143	MY46107525	MY46107931	MY46108267
MY46104481	MY46105146	MY46105769	MY46106216	MY46107176	MY46107536	MY46107932	MY46108295
MY46104482	MY46105158	MY46105770	MY46106221	MY46107180	MY46107546	MY46107933	MY46108296
MY46104483	MY46105226	MY46105772	MY46106237	MY46107210	MY46107547	MY46107934	MY46108297
MY46104484	MY46105227	MY46105781	MY46106277	MY46107228	MY46107548	MY46107949	MY46108298
MY46104520	MY46105229	MY46105782	MY46106310	MY46107236	MY46107566	MY46107960	MY46108299
MY46104523	MY46105230	MY46105802	MY46106332	MY46107237	MY46107567	MY46107961	MY46108304
MY46104548	MY46105238	MY46105806	MY46106360	MY46107271	MY46107587	MY46107964	MY46108305
MY46104573	MY46105239	MY46105807	MY46106362	MY46107272	MY46107598	MY46107966	MY46108309
MY46104574	MY46105254	MY46105808	MY46106363	MY46107287	MY46107599	MY46107982	MY46108310
MY46104575	MY46105259	MY46105837	MY46106364	MY46107314	MY46107601	MY46108017	MY46108311
MY46104576	MY46105261	MY46105838	MY46106365	MY46107318	MY46107602	MY46108038	MY46108312
MY46104580	MY46105284	MY46105839	MY46106441	MY46107355	MY46107603	MY46108045	MY46108313

MY46108314	MY46108455	MY46108552	MY46108661	MY46108827	MY46109097	MY46109281	MY46109446
MY46108315	MY46108456	MY46108553	MY46108662	MY46108828	MY46109098	MY46109282	MY46109447
MY46108316	MY46108457	MY46108554	MY46108663	MY46108829	MY46109099	MY46109283	MY46109448
MY46108317	MY46108458	MY46108555	MY46108664	MY46108836	MY46109100	MY46109294	MY46109449
MY46108318	MY46108459	MY46108556	MY46108665	MY46108850	MY46109101	MY46109303	MY46109452
MY46108324	MY46108460	MY46108557	MY46108666	MY46108867	MY46109102	MY46109304	MY46109453
MY46108327	MY46108461	MY46108558	MY46108667	MY46108872	MY46109103	MY46109305	MY46109454
MY46108328	MY46108463	MY46108566	MY46108668	MY46108881	MY46109105	MY46109306	MY46109455
MY46108329	MY46108465	MY46108570	MY46108669	MY46108882	MY46109106	MY46109307	MY46109456
MY46108334	MY46108466	MY46108577	MY46108670	MY46108883	MY46109114	MY46109316	MY46109459
MY46108337	MY46108467	MY46108581	MY46108671	MY46108884	MY46109115	MY46109317	MY46109462
MY46108341	MY46108468	MY46108582	MY46108674	MY46108885	MY46109116	MY46109332	MY46109463
MY46108342	MY46108470	MY46108583	MY46108675	MY46108887	MY46109117	MY46109344	MY46109469
MY46108344	MY46108471	MY46108591	MY46108680	MY46108937	MY46109119	MY46109345	MY46109473
MY46108345	MY46108473	MY46108592	MY46108681	MY46108938	MY46109131	MY46109347	MY46109479
MY46108346	MY46108474	MY46108597	MY46108689	MY46108939	MY46109135	MY46109353	MY46109483
MY46108347	MY46108475	MY46108598	MY46108690	MY46108940	MY46109137	MY46109354	MY46109485
MY46108348	MY46108478	MY46108599	MY46108691	MY46108941	MY46109138	MY46109355	MY46109486
MY46108349	MY46108485	MY46108600	MY46108692	MY46108942	MY46109139	MY46109356	MY46109497
MY46108350	MY46108491	MY46108601	MY46108694	MY46108943	MY46109142	MY46109357	MY46109498
MY46108352	MY46108497	MY46108602	MY46108697	MY46108944	MY46109144	MY46109358	MY46109510
MY46108363	MY46108498	MY46108603	MY46108707	MY46108945	MY46109145	MY46109359	MY46109511
MY46108364	MY46108503	MY46108613	MY46108729	MY46108946	MY46109146	MY46109366	MY46109529
MY46108365	MY46108504	MY46108616	MY46108734	MY46108947	MY46109149	MY46109367	MY46109532
MY46108366	MY46108507	MY46108617	MY46108736	MY46108948	MY46109150	MY46109368	MY46109533
MY46108367	MY46108508	MY46108618	MY46108737	MY46108952	MY46109181	MY46109369	MY46109534
MY46108371	MY46108509	MY46108620	MY46108739	MY46108978	MY46109185	MY46109370	MY46109535
MY46108384	MY46108510	MY46108621	MY46108745	MY46108985	MY46109186	MY46109383	MY46109536
MY46108395	MY46108511	MY46108622	MY46108773	MY46109019	MY46109198	MY46109384	MY46109537
MY46108398	MY46108512	MY46108623	MY46108774	MY46109021	MY46109199	MY46109385	MY46109538
MY46108402	MY46108513	MY46108624	MY46108775	MY46109025	MY46109201	MY46109386	MY46109539
MY46108403	MY46108514	MY46108625	MY46108776	MY46109035	MY46109202	MY46109390	MY46109540
MY46108404	MY46108515	MY46108626	MY46108777	MY46109036	MY46109211	MY46109395	MY46109541
MY46108405	MY46108516	MY46108627	MY46108778	MY46109037	MY46109212	MY46109396	MY46109542
MY46108406	MY46108521	MY46108628	MY46108779	MY46109038	MY46109234	MY46109402	MY46109543
MY46108407	MY46108522	MY46108629	MY46108783	MY46109039	MY46109236	MY46109403	MY46109544
MY46108408	MY46108523	MY46108634	MY46108786	MY46109045	MY46109239	MY46109404	MY46109545
MY46108409	MY46108526	MY46108635	MY46108787	MY46109072	MY46109244	MY46109429	MY46109546
MY46108414	MY46108527	MY46108636	MY46108789	MY46109077	MY46109245	MY46109430	MY46109559
MY46108416	MY46108529	MY46108637	MY46108793	MY46109078	MY46109246	MY46109431	MY46109560
MY46108430	MY46108530	MY46108644	MY46108794	MY46109080	MY46109247	MY46109432	MY46109561
MY46108431	MY46108531	MY46108652	MY46108798	MY46109081	MY46109270	MY46109433	MY46109587
MY46108432	MY46108537	MY46108653	MY46108800	MY46109082	MY46109271	MY46109434	MY46109593
MY46108433	MY46108540	MY46108654	MY46108802	MY46109084	MY46109272	MY46109435	MY46109607
MY46108434	MY46108541	MY46108655	MY46108803	MY46109085	MY46109274	MY46109437	MY46109631
MY46108435	MY46108542	MY46108656	MY46108804	MY46109087	MY46109276	MY46109438	MY46109651
MY46108437	MY46108547	MY46108657	MY46108806	MY46109089	MY46109277	MY46109439	MY46109663
MY46108438	MY46108549	MY46108658	MY46108809	MY46109090	MY46109278	MY46109441	MY46109677
MY46108442	MY46108550	MY46108659	MY46108810	MY46109092	MY46109279	MY46109442	MY46109690
MY46108454	MY46108551	MY46108660	MY46108820	MY46109096	MY46109280	MY46109443	MY46109691

MY46109692	MY46109802	MY46109987	MY46110175	MY46110470	MY46110685	MY46110792	MY46111088
MY46109693	MY46109803	MY46109998	MY46110176	MY46110488	MY46110686	MY46110807	MY46111092
MY46109694	MY46109804	MY46110008	MY46110188	MY46110496	MY46110687	MY46110819	MY46111093
MY46109706	MY46109818	MY46110011	MY46110190	MY46110500	MY46110688	MY46110820	MY46111094
MY46109707	MY46109821	MY46110012	MY46110217	MY46110503	MY46110691	MY46110821	MY46111095
MY46109708	MY46109834	MY46110016	MY46110218	MY46110504	MY46110692	MY46110822	MY46111097
MY46109709	MY46109835	MY46110020	MY46110239	MY46110505	MY46110693	MY46110833	MY46111098
MY46109710	MY46109836	MY46110024	MY46110254	MY46110506	MY46110694	MY46110835	MY46111099
MY46109711	MY46109837	MY46110027	MY46110257	MY46110507	MY46110695	MY46110839	MY46111103
MY46109712	MY46109838	MY46110028	MY46110258	MY46110508	MY46110696	MY46110844	MY46111106
MY46109713	MY46109856	MY46110030	MY46110274	MY46110509	MY46110700	MY46110865	MY46111107
MY46109716	MY46109859	MY46110032	MY46110276	MY46110510	MY46110701	MY46110866	MY46111108
MY46109717	MY46109877	MY46110043	MY46110277	MY46110511	MY46110702	MY46110867	MY46111109
MY46109723	MY46109879	MY46110044	MY46110279	MY46110520	MY46110703	MY46110868	MY46111110
MY46109725	MY46109898	MY46110045	MY46110282	MY46110528	MY46110704	MY46110870	MY46111111
MY46109726	MY46109900	MY46110047	MY46110298	MY46110529	MY46110705	MY46110872	MY46111112
MY46109744	MY46109901	MY46110060	MY46110311	MY46110530	MY46110706	MY46110873	MY46111113
MY46109745	MY46109902	MY46110077	MY46110314	MY46110531	MY46110707	MY46110886	MY46111114
MY46109752	MY46109903	MY46110078	MY46110315	MY46110532	MY46110708	MY46110896	MY46111115
MY46109753	MY46109904	MY46110079	MY46110316	MY46110533	MY46110709	MY46110899	MY46111116
MY46109759	MY46109910	MY46110080	MY46110318	MY46110534	MY46110710	MY46110910	MY46111117
MY46109760	MY46109911	MY46110081	MY46110326	MY46110535	MY46110720	MY46110916	MY46111118
MY46109762	MY46109912	MY46110089	MY46110330	MY46110536	MY46110722	MY46110933	MY46111119
MY46109763	MY46109913	MY46110092	MY46110343	MY46110537	MY46110727	MY46110946	MY46111120
MY46109764	MY46109914	MY46110093	MY46110346	MY46110538	MY46110731	MY46110965	MY46111121
MY46109765	MY46109915	MY46110095	MY46110348	MY46110543	MY46110732	MY46110967	MY46111124
MY46109766	MY46109916	MY46110096	MY46110354	MY46110611	MY46110733	MY46110968	MY46111125
MY46109767	MY46109917	MY46110097	MY46110355	MY46110628	MY46110734	MY46110972	MY46111126
MY46109769	MY46109918	MY46110098	MY46110361	MY46110629	MY46110745	MY46110985	MY46111127
MY46109771	MY46109919	MY46110099	MY46110362	MY46110638	MY46110750	MY46110987	MY46111128
MY46109772	MY46109920	MY46110100	MY46110363	MY46110639	MY46110752	MY46110988	MY46111129
MY46109773	MY46109921	MY46110101	MY46110366	MY46110643	MY46110755	MY46110989	MY46111130
MY46109774	MY46109922	MY46110102	MY46110379	MY46110645	MY46110756	MY46110992	MY46111131
MY46109777	MY46109923	MY46110107	MY46110380	MY46110651	MY46110757	MY46110995	MY46111132
MY46109785	MY46109924	MY46110108	MY46110386	MY46110653	MY46110758	MY46110999	MY46111133
MY46109786	MY46109929	MY46110109	MY46110387	MY46110655	MY46110760	MY46111001	MY46111134
MY46109787	MY46109930	MY46110148	MY46110388	MY46110656	MY46110763	MY46111010	MY46111135
MY46109788	MY46109954	MY46110149	MY46110389	MY46110660	MY46110764	MY46111014	MY46111136
MY46109789	MY46109955	MY46110151	MY46110392	MY46110661	MY46110765	MY46111034	MY46111139
MY46109790	MY46109956	MY46110152	MY46110393	MY46110662	MY46110767	MY46111040	MY46111140
MY46109791	MY46109957	MY46110153	MY46110394	MY46110663	MY46110768	MY46111049	MY46111141
MY46109792	MY46109969	MY46110154	MY46110395	MY46110664	MY46110770	MY46111061	MY46111142
MY46109793	MY46109970	MY46110155	MY46110400	MY46110665	MY46110771	MY46111068	MY46111146
MY46109794	MY46109971	MY46110156	MY46110401	MY46110666	MY46110772	MY46111069	MY46111147
MY46109795	MY46109972	MY46110161	MY46110402	MY46110667	MY46110773	MY46111070	MY46111148
MY46109796	MY46109973	MY46110167	MY46110427	MY46110668	MY46110774	MY46111071	MY46111149
MY46109797	MY46109974	MY46110169	MY46110428	MY46110669	MY46110775	MY46111072	MY46111150
MY46109798	MY46109976	MY46110171	MY46110441	MY46110680	MY46110776	MY46111076	MY46111151
MY46109800	MY46109977	MY46110172	MY46110444	MY46110683	MY46110781	MY46111077	MY46111153
MY46109801	MY46109978	MY46110174	MY46110459	MY46110684	MY46110791	MY46111078	MY46111154

MY46111155	MY46111189	MY46111220	MY46111260	MY46111339	MY46111407	MY46111509	SG46100199
MY46111156	MY46111193	MY46111221	MY46111265	MY46111372	MY46111409	MY46111520	SG46100204
MY46111158	MY46111194	MY46111223	MY46111266	MY46111374	MY46111419	SG46100101	SG46100209
MY46111159	MY46111198	MY46111225	MY46111267	MY46111375	MY46111435	SG46100102	SG46100210
MY46111160	MY46111201	MY46111226	MY46111268	MY46111376	MY46111447	SG46100105	SG46100217
MY46111161	MY46111202	MY46111228	MY46111269	MY46111377	MY46111452	SG46100106	SG46100228
MY46111162	MY46111203	MY46111229	MY46111270	MY46111378	MY46111459	SG46100108	SG46100241
MY46111163	MY46111204	MY46111231	MY46111271	MY46111379	MY46111464	SG46100110	SG46100248
MY46111164	MY46111205	MY46111232	MY46111272	MY46111380	MY46111465	SG46100114	SG46100249
MY46111165	MY46111206	MY46111233	MY46111276	MY46111381	MY46111466	SG46100179	SG46100256
MY46111166	MY46111207	MY46111234	MY46111299	MY46111382	MY46111467	SG46100188	
MY46111167	MY46111208	MY46111236	MY46111308	MY46111383	MY46111489	SG46100193	
MY46111182	MY46111209	MY46111256	MY46111333	MY46111392	MY46111491	SG46100195	
MY46111184	MY46111210	MY46111258	MY46111336	MY46111405	MY46111494	SG46100196	

Revision History:

Revision Number	Date	Author	Reason For Change
E5071C-20	Nov-2012	jm	As published
E5071C-20A	Feb-2013	jm	Add serial-numbers Modify mixer-IC diag test procedure Change service note type from Modification Recommended to Modification Recommended Internal Only.
E5071C-20B	Sept-2013	ls	Update Receiver PN from E5071-62482/ 492/ 297 to E5071-62582/ 592/ 397.

== End of Document ==