



### SUMMARY TEST DATA ON AMPLIFIER

**Customer :**  
**Job No :**  
**Model No : PEC-25/15-618-15-SFF**  
**Serial No : PL1089**

**Tested By : Kevin Mason**  
**Temperature : +25°C**  
**Date : 09/18/03**

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	Frequency Range:	6 – 18 GHz	Pass	
2	Gain:	J1-J2: 23 to 27dB J1-J3: 13 to 17dB	Pass (See Plots)	
3	Gain Variation: J1-J2, J1-J3	±2.5 dB Max.	J1-J2 ±1.59 dB J1-J3 ±1.92 dB	
4	Noise Figure:	10.0 dB Max.	Pass (See Plots)	
5	Output Power J1-J2: J1-J3:	+13 dBm Min. with -9 to +5dBm RF CW in J1 +13 dBm Min. with +1 to +5dBm RF CW in J1	15.0 to 18.2 dBm 15.0 to 17.4 dBm	
6	VSWR In/Out:	2.0:1 Max.	Pass (See Plots)	
7	Harmonics:	15dBc Min.	≥ 15dBc	
8	OIP3	+24dBm Min. @ J2 +21dBm Min. @ J3	> +24dBm >+21dBm	
9	Temperature Range	-54 to +85 °C	Pass	
10	Isolation	0.1dB Max. J2 to J3	< 0.1dB	
11	DC Power	620mA@+15 VDC +/-2V	373mA	

**Production Manager Approval:**  **Date: 09/18/03**

**QA/QC Approval:**  **Date: 09/18/03**

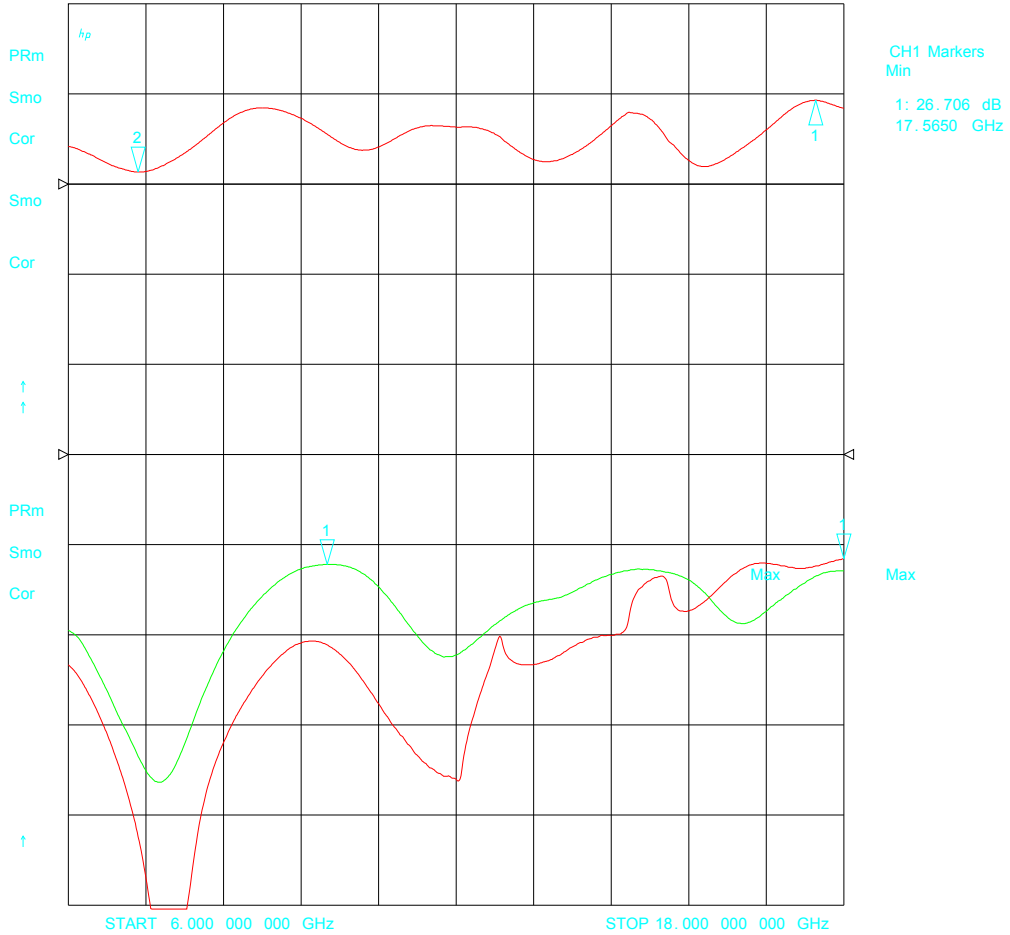
7311-G Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731  
 email: [sales@planarelec.com](mailto:sales@planarelec.com)



### VNA Plot – J1 to J2

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CH1	S21	LOG	4 dB/	REF 23 dB	2: 23.526 dB	7.080 000 000 GHz
CH2	S11	LOG	5 dB/	REF -9.54 dB	1: -15.645 dB	10.005 000 000 GHz
CH3	S22	LOG	5 dB/	REF -9.54 dB	1: -15.327 dB	18.000 000 000 GHz

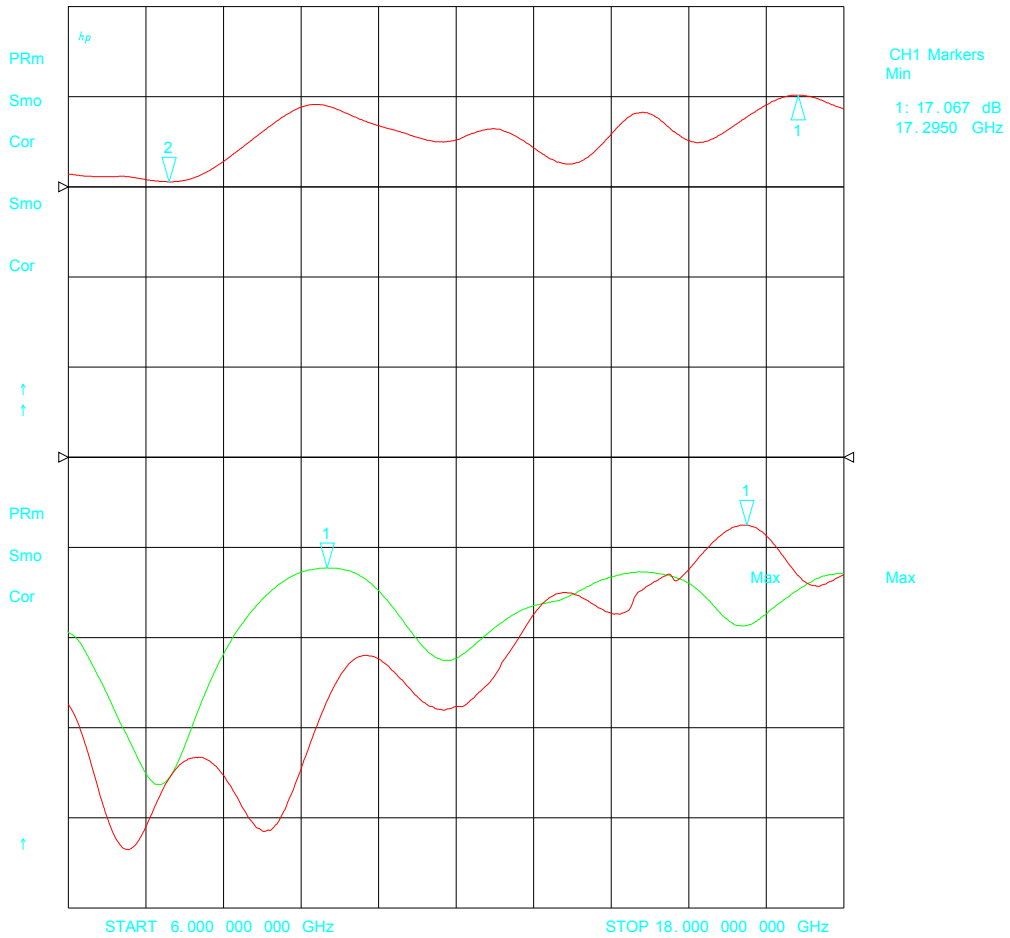


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### VNA Plot – J1 to J3

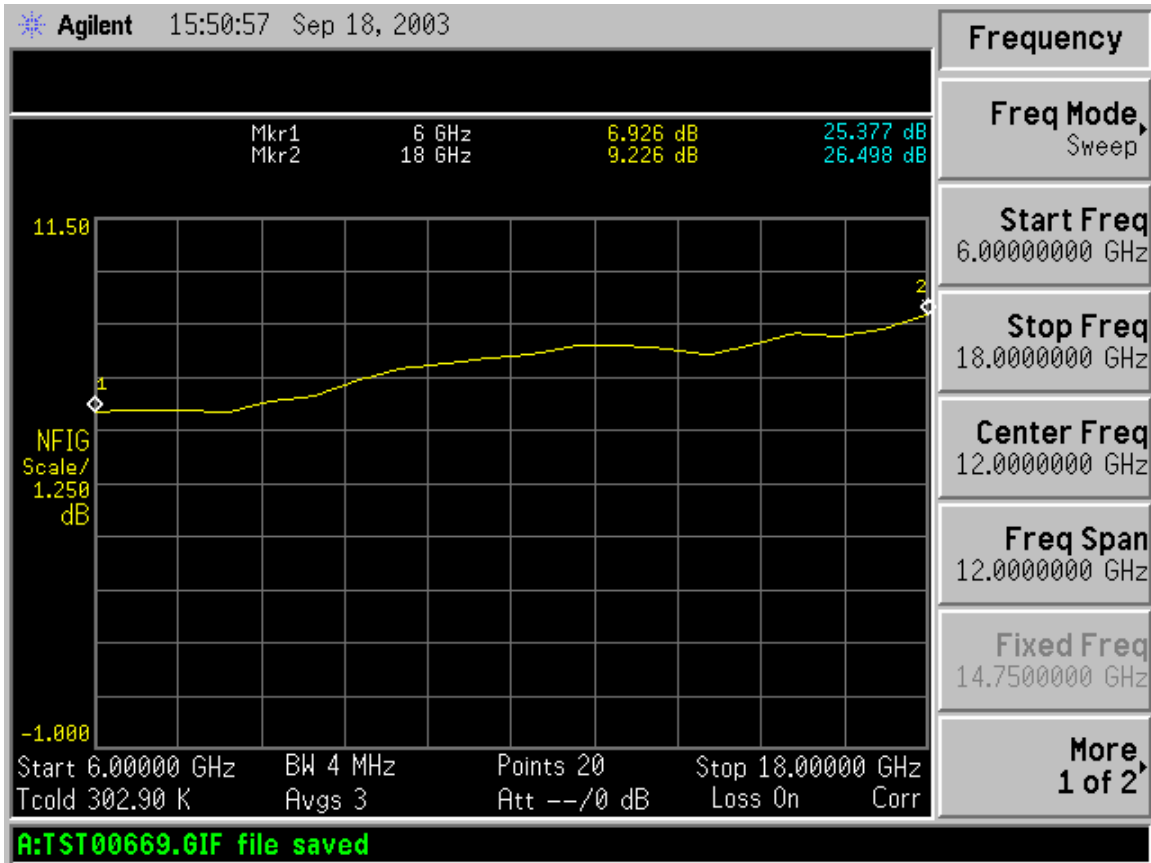
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CH1	S21	LOG	4 dB/	REF 13 dB	2: 13.216 dB	7.560 000 000 GHz
CH2	S11	LOG	5 dB/	REF -9.54 dB	1: -15.687 dB	10.005 000 000 GHz
CH3	S22	LOG	5 dB/	REF -9.54 dB	1: -13.308 dB	16.500 000 000 GHz



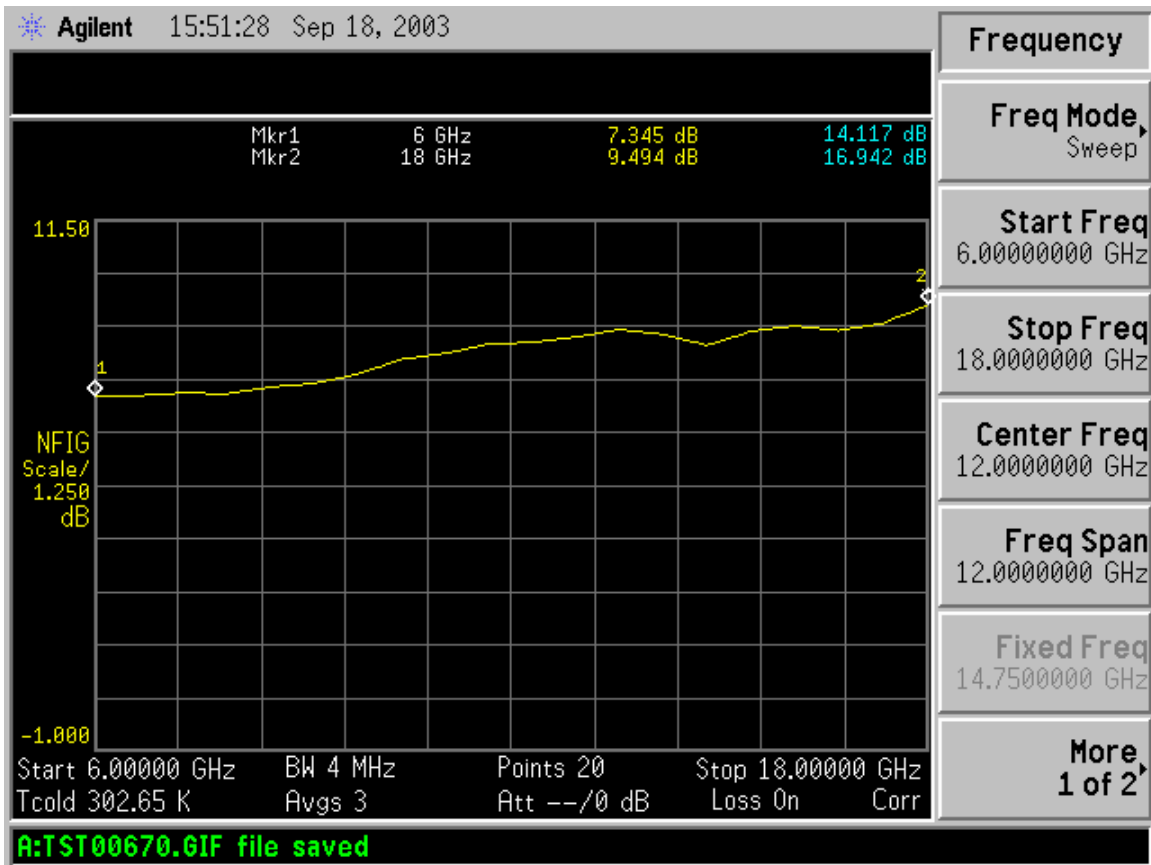


### Noise Figure Plot - J1 to J2



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### Noise Figure Plot - J1 to J3



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