



SUMMARY TEST DATA ON AMPLIFIER

Customer :
Job No :
Model No : PEC-25/15-618-15-SFF
Serial No : PL860

Tested By : Kevin Mason
Temperature : +25°C
Date : 04/09/03

| 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: ±2.07 dB J1-J3: ±2.02 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 | 14.7 to 18.8 dBm 15.5 to 18.0 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 | 333mA | |

Production Manager Approval:  **Date: 04/09/03**

QA/QC Approval:  **Date: 04/09/03**

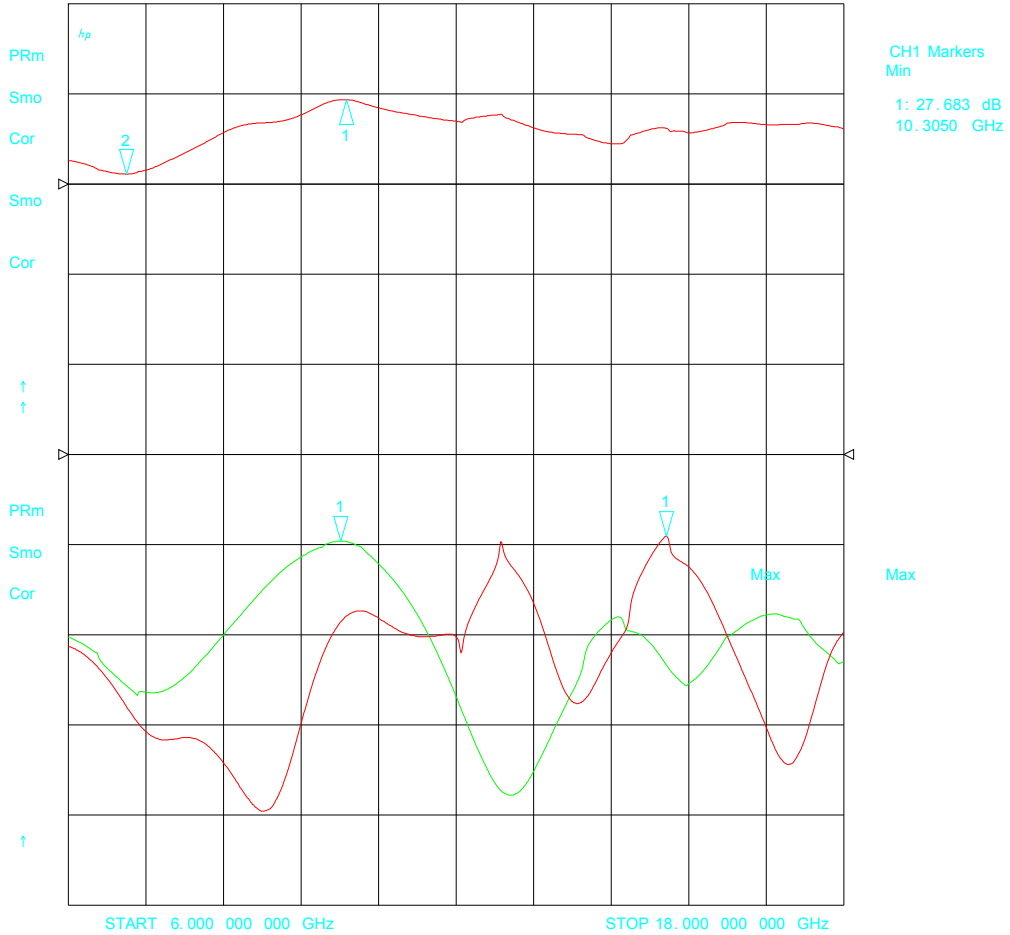
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 email: sales@planarelec.com



VNA Plot – J1 to J2

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| | | | | | | |
|-----|-----|-----|-------|--------------|---------------|--------------------|
| CH1 | S21 | LOG | 5 dB/ | REF 23 dB | 2: 23.541 dB | 6.900 000 000 GHz |
| CH2 | S11 | LOG | 5 dB/ | REF -9.54 dB | 1: -14.346 dB | 10.215 000 000 GHz |
| CH3 | S22 | LOG | 5 dB/ | REF -9.54 dB | 1: -14.082 dB | 15.255 000 000 GHz |

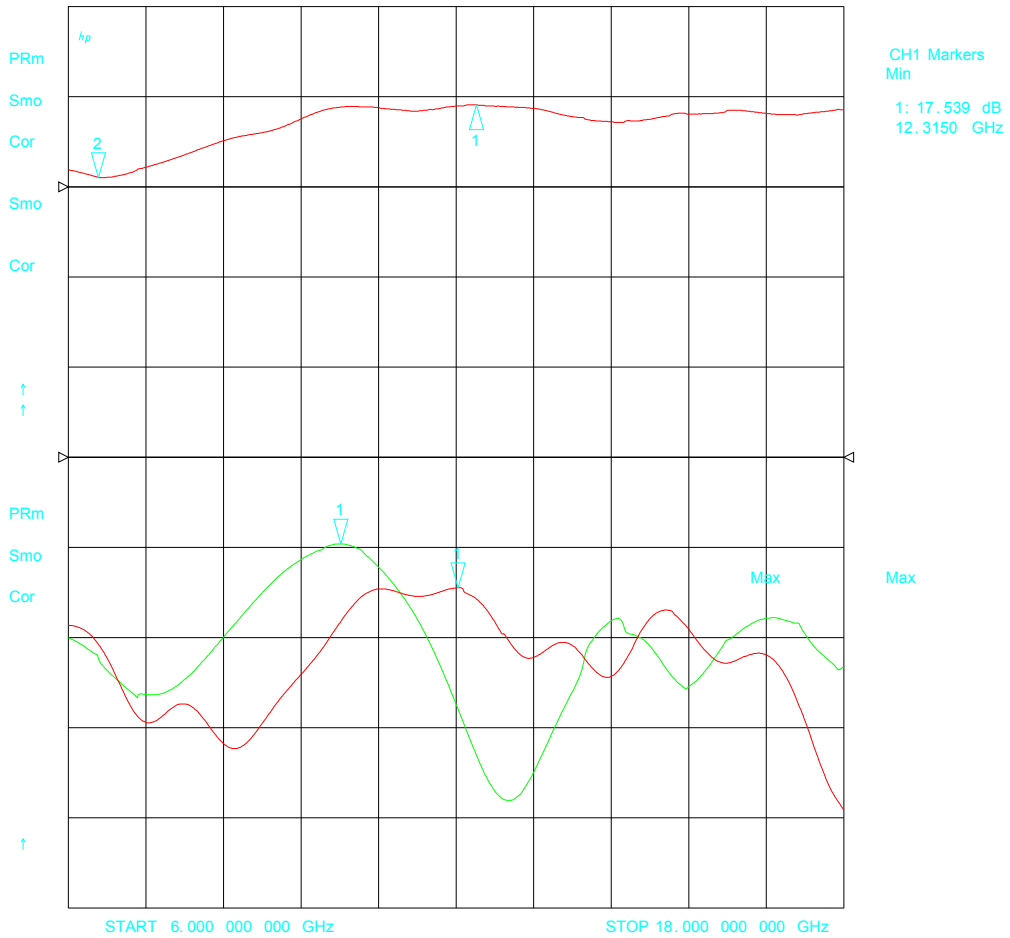


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VNA Plot – J1 to J3

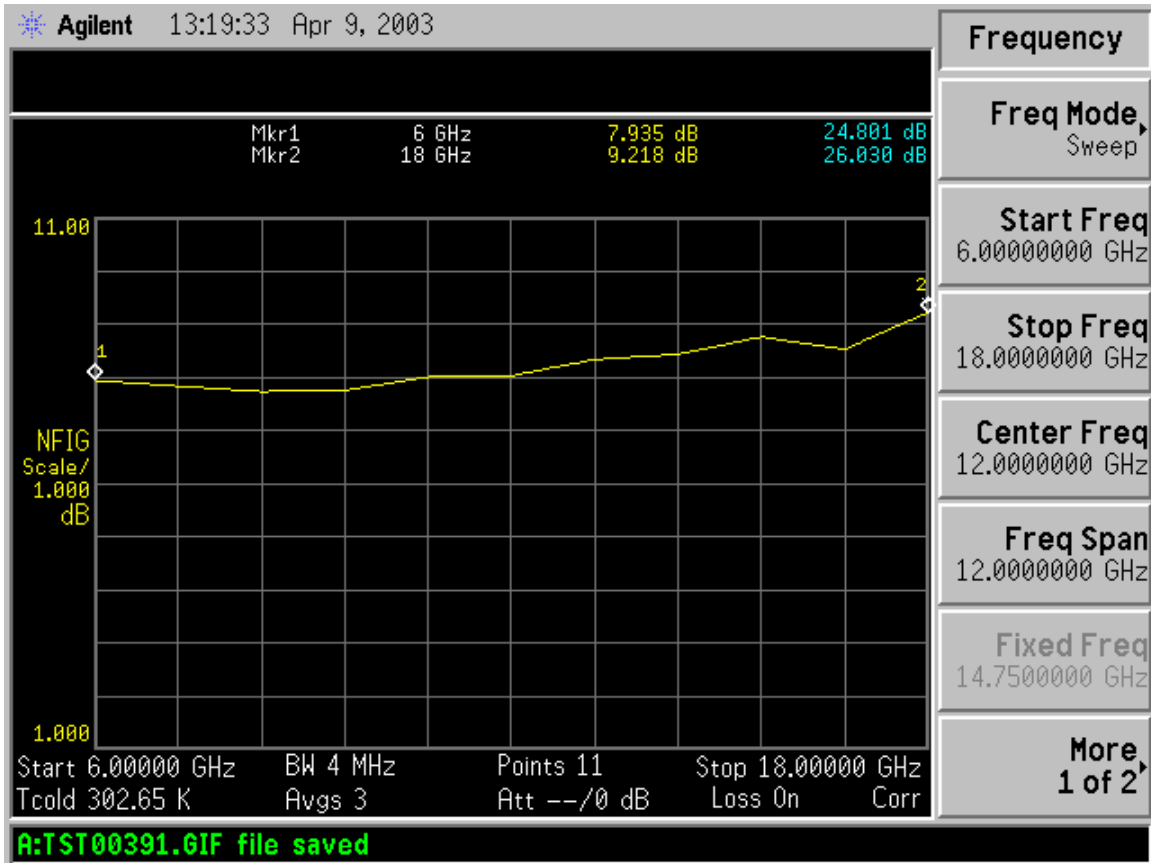
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| | | | | | | |
|-----|-----|-----|-------|--------------|---------------|--------------------|
| CH1 | S21 | LOG | 5 dB/ | REF 13 dB | 2: 13.494 dB | 6.465 000 000 GHz |
| CH2 | S11 | LOG | 5 dB/ | REF -9.54 dB | 1: -14.348 dB | 10.215 000 000 GHz |
| CH3 | S22 | LOG | 5 dB/ | REF -9.54 dB | 1: -16.777 dB | 12.030 000 000 GHz |

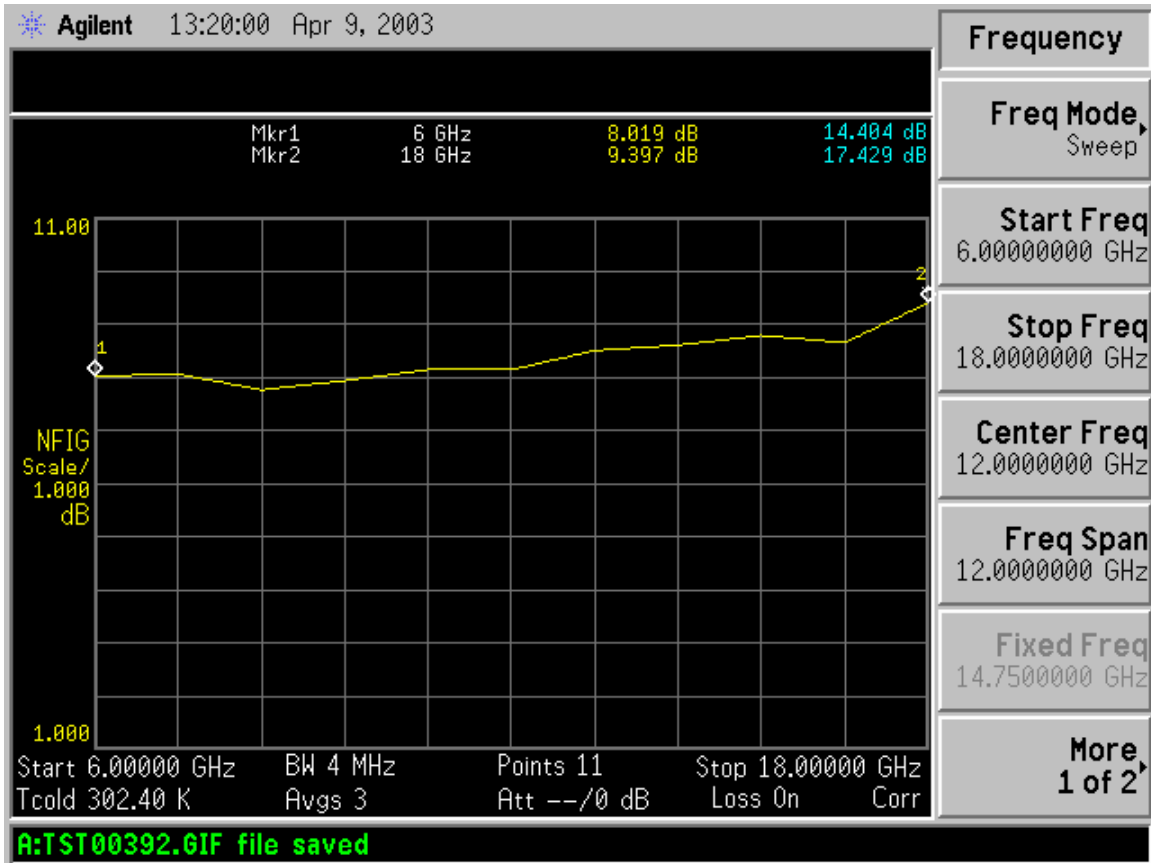




Noise Figure Plot - J1 to J2



Noise Figure Plot - J1 to J3



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