

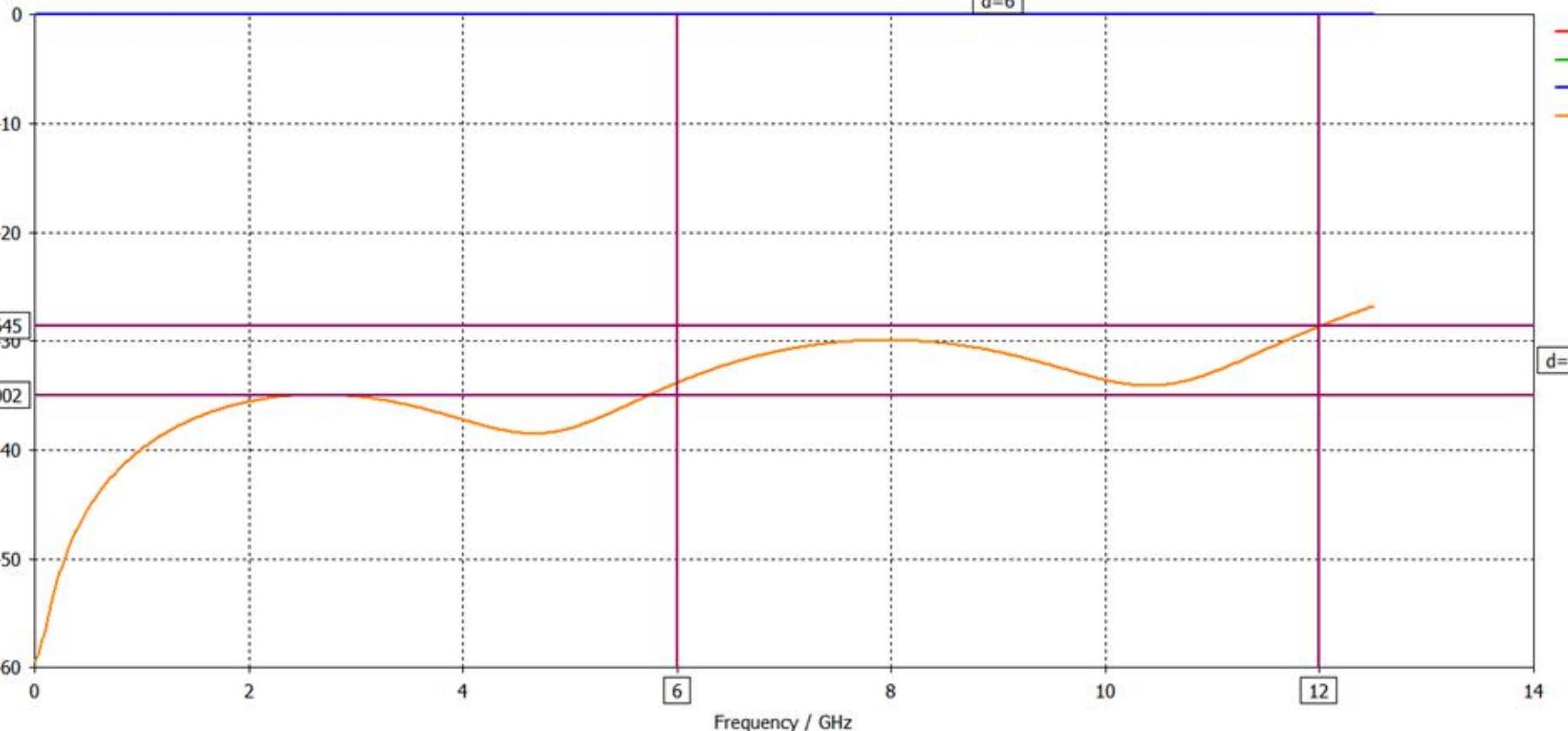
6 5 4 3 2 1

**Connector ONLY**

S-Parameters [Magnitude in dB]

d=6

S<sub>1,1</sub>  
S<sub>2,1</sub>  
S<sub>1,2</sub>  
S<sub>2,2</sub>



**Electrical:**

|                                 |                          |
|---------------------------------|--------------------------|
| Impedance                       | 75 Ohms                  |
| Freq Range                      | 0-12.0 GHz               |
| Working Voltage                 | 500 Vrms                 |
| Dielectric withstanding voltage | 1500 Vrms                |
| Reflection Factor (VSWR)        | 1.04 MAX 0.0-6.0 GHz     |
|                                 | 1.08 MAX 6.1-12.0 GHz    |
| Contact Resistance              | Center Contact 1.5 m Ohm |
|                                 | Outer Contact 1.0 m Ohm  |
| Insulation Resistance           | >5000 Meg Ohm            |

**Materials:**

|             |                             |
|-------------|-----------------------------|
| Center Pin  | PhosBronze / 10 $\mu$ " Au  |
| Metal Parts | Brass / 70 $\mu$ " Ni Plate |
| Insulators  | PTFE                        |

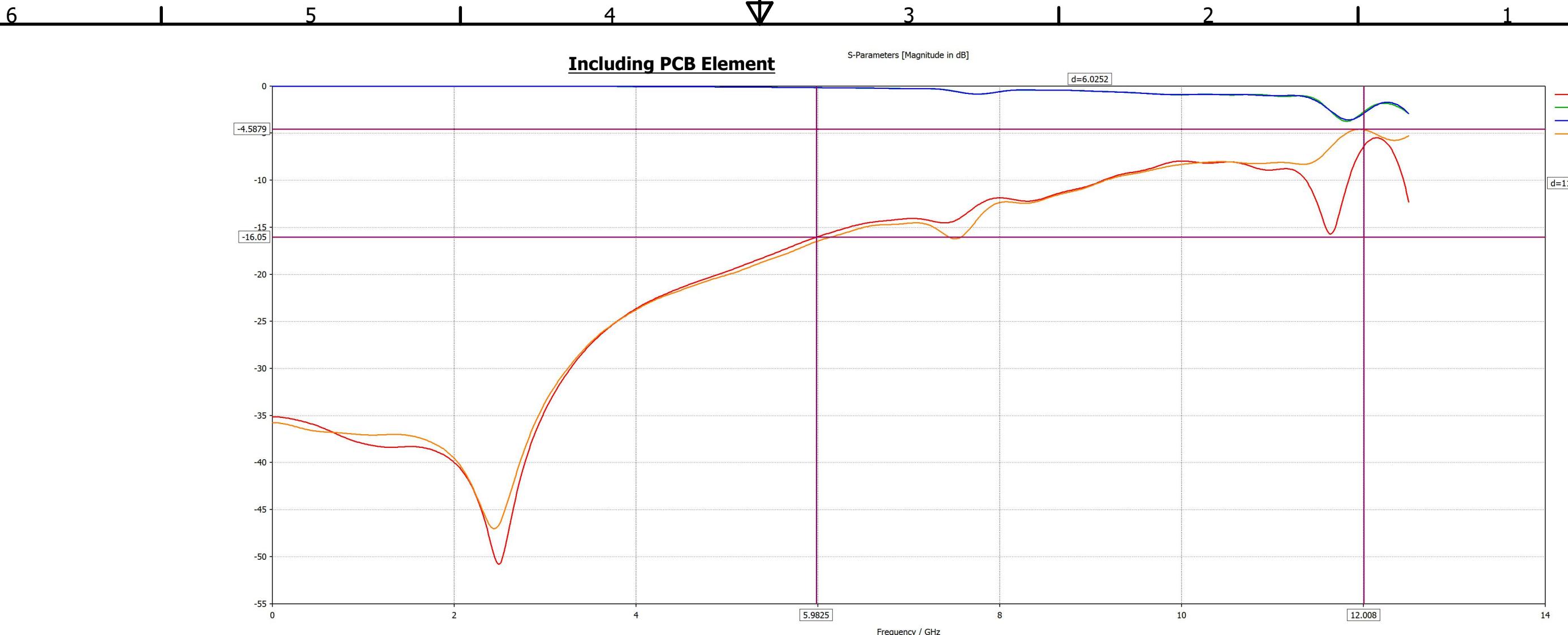
**Environmental:**

|               |              |
|---------------|--------------|
| Temp Ranges   | -65 to +85°C |
| Mating Cycles | 250          |

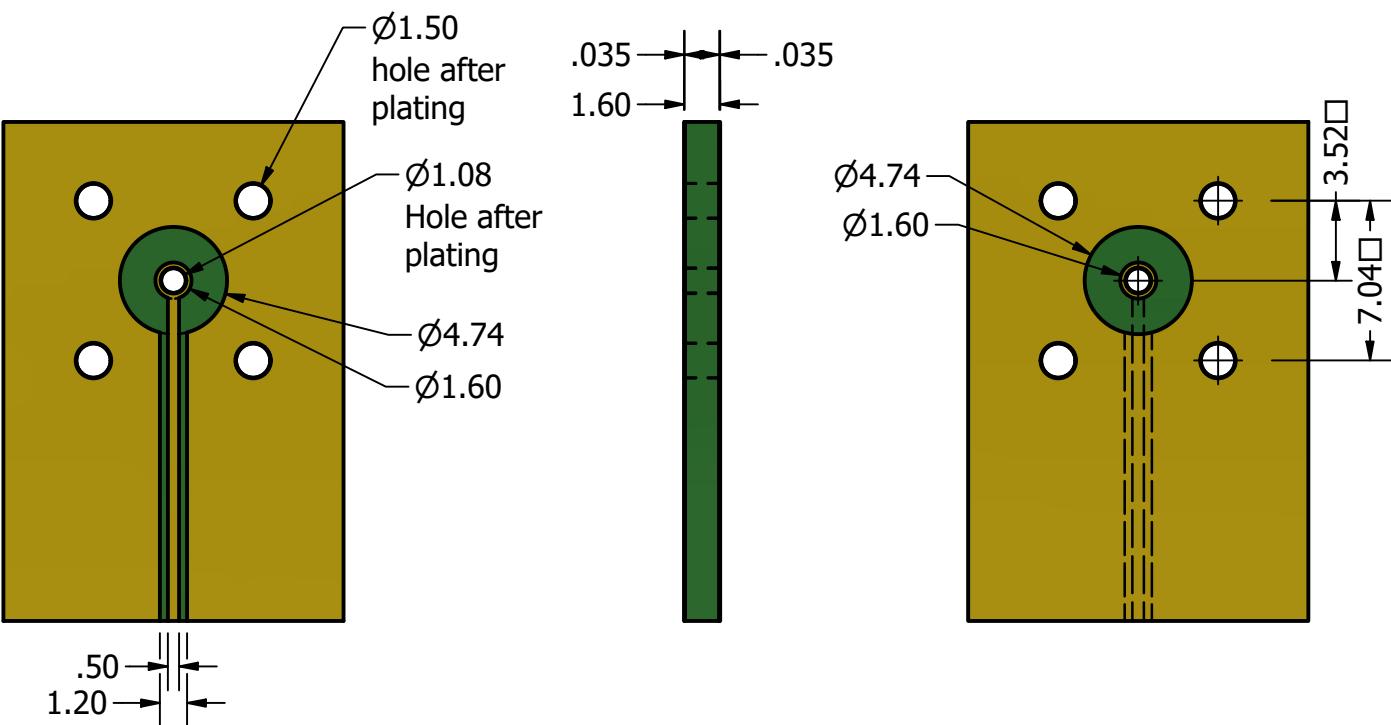
**Processing:**

|                |   |
|----------------|---|
| Wave Soldering | Solder bath to be 265°C $\pm$ 5°C Hold time to be 10-12 seconds |
| Hand Soldering | Iron to be 380 °C $\pm$ 5°C dwell time to be 5-7 seconds        |

| Design Right Protected | Material:                       | Finish:   | Gen Tol $\pm$ 0.10   | DO NOT SCALE                      |                |
|------------------------|---------------------------------|---|--|-----------------------------------|----------------|
|                        |                                 |   |  | Unit of Measure: millimeters (mm) |                |
| Third Angle Projection | Designed by<br><b>P.Fayers</b>  | Checked by<br>Approved by   | ©2024  | Date<br>11 Oct 2010               | A3             |
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|                        |                                 |   | Part No:<br><b>XBS-12-TB41-NN Cust</b>                                 | Issue<br>3.0                      | Sheet<br>2 / 3 |



**Suggested PCB layout intended as starting point for design iteration**



|   |                             |            |                    |   |
|---|-----------------------------|------------|--------------------|---|
| <b>Design Right Protected</b>                                       | Material: Generic           | Finish:    | Gen Tol $\pm 0.10$ | DO NOT SCALE  |
| Third Angle Projection  | Designed by <b>P.Fayers</b> | Checked by | Approved by        | Unit of Measure: millimeters (mm)   |
|   |                             |            |                    | ©2024 Date 11 Oct 2010 <b>A3</b>  |
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