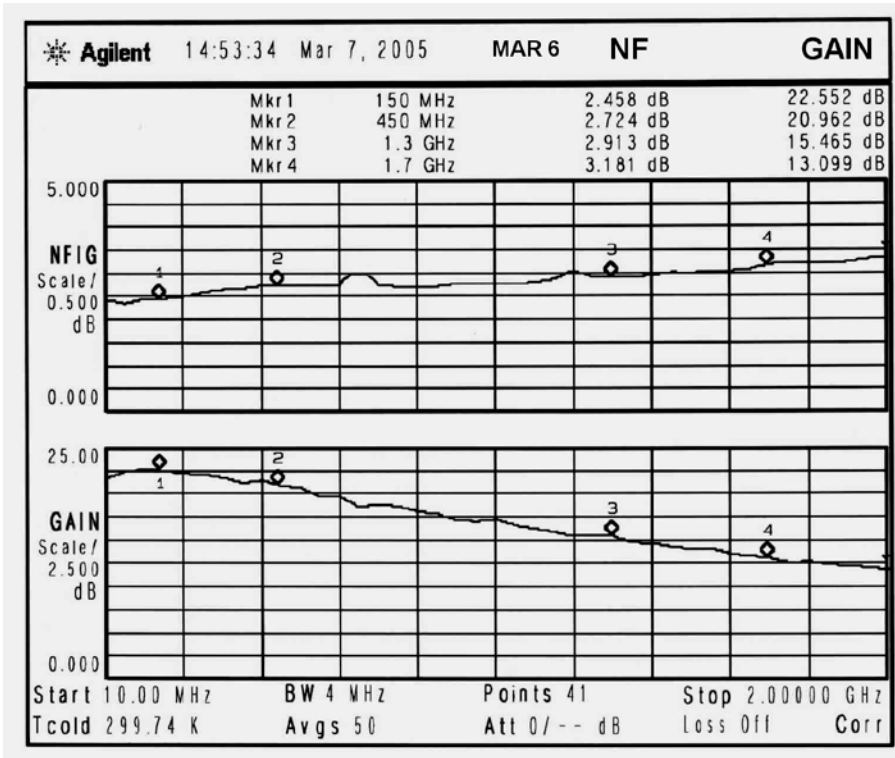
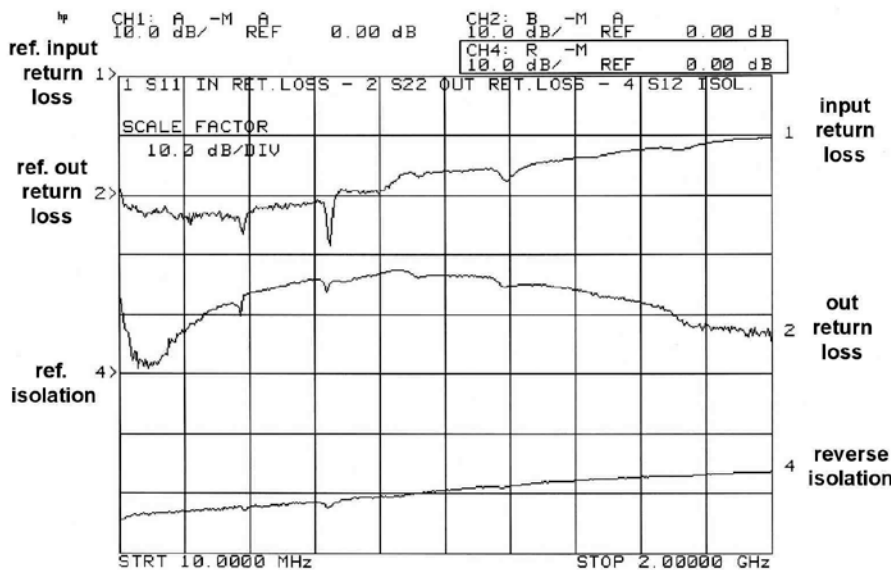


Il MAR-6SM della Mini-Circuits (o Agilent MSA-0686), nato nei gloriosi laboratori della AvanteK (poi HP/Agilent), è un MMIC prodotto già da molti anni. Tutti conosciamo il progresso continuo nel settore RF e microonde negli ultimi anni, quindi, se un tale dispositivo resiste nel tempo significa che dovrà pur avere delle buone qualità. Alcune di queste qualità le abbiamo verificate con l'aiuto della nostra strumentazione ed ecco i risultati:

- Buona figura di rumore: 2.5 dB in VHF, 2,8 dB in UHF e 3 dB oltre 1 GHz
- Guadagno da 22 dB in VHF a 13 dB a 1.7 GHz, con isolamento inverso medio di -20dB ( $S_{12}$ )
- Adattamento di impedenza ottimo, con return loss  $\geq 15$  dB su tutta la banda di frequenza



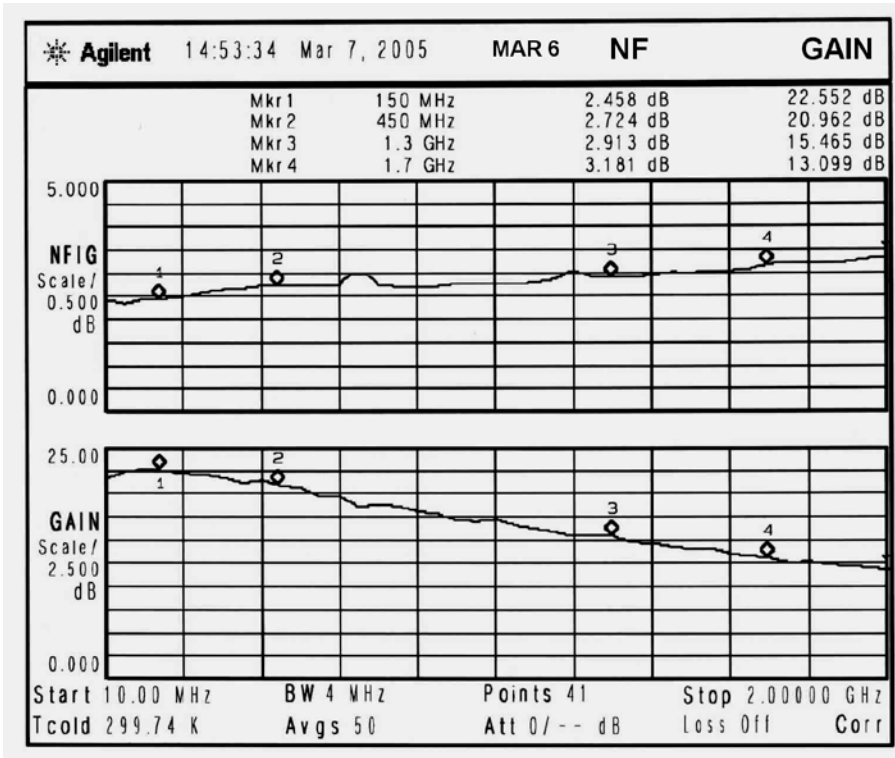
Noise Figure and Gain Test



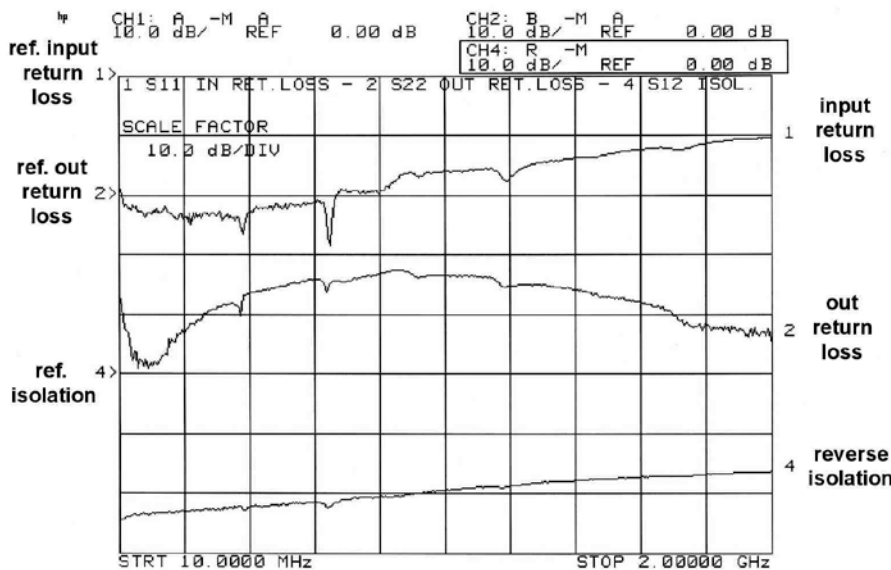
Return loss and Isolation Test ( $S_{12}$ )

Mini-circuits MAR-6SM (or Agilent MSA-0686), born in the glorious Avantek laboratories (later HP/Agilent), is a MMIC manufactured by many years. We all know the progress made in RF and microwave technology in recent years, therefore, if this device production lasts for such a long time this means that it must have good qualities. Some of these qualities were tested with the help of our test equipment and here are the results:

- Good noise figure: 2.5 dB at VHF, 2,8 dB at UHF and 3 dB over 1 GHz
- Gain from 22 dB at VHF a 13 dB to 1.7 GHz, with -20dB of average reverse insulation ( $S_{12}$ )
- Very good impedance matching, return loss  $\geq 15$  dB on the whole frequency band



Noise Figure and Gain Test



Return loss and Isolation Test ( $S_{12}$ )