Wideband Amplifier Picosecond 5812

Matthias DD1US
February 28th 2016

Hello,

finally I checked today a wideband amplifier which was sitting in my drawer already for quite some time.

It is a Picosecond Type 5812 wideband amplifier. Its specification includes a very nice flat frequency response from 6 kHz up to 2.5 GHz (those are the -3dB bandwidth corners). The noise figure is 6dB and the rise-time is 145ps. The maximum output power is +12dBm. The nominal supply voltage is 12V, the associated supply current is 40mA. I checked and the gain is not changing much when varying the supply voltage between 7…15V. I suppose the maximum output power does. My model has the serial number S/N 87 and was built 5/93.

Next please find 2 pictures of the amplifier. Under the protection covers are 2 SMA connectors and a feedthrough filter for the DC supply.
Below please find the frequency response which I measured. It matched the specified values very much. Please ignore the measurement above 1.8 GHz as my measurement setup is only calibrated up to 1.8 GHz.

I appreciate any feedback and additional information. Please send them to my Email address which you find below.

Kind regards

Matthias     DD1US

Email: DD1US@AMSAT.ORG
Homepage: http://www.dd1us.de