

2-4 GHz Isolator UTE Microwave Inc. CT-3240 OT

Matthias, DD1US, June 14th 2021

Hello,

Some time ago I acquired some isolators which I wanted to use for 2.4 GHz. They are from UTE Microwave Inc. The part number is CT-3240 OT. I only found some limited specifications on the internet:

Frequency range: 2...4 GHz

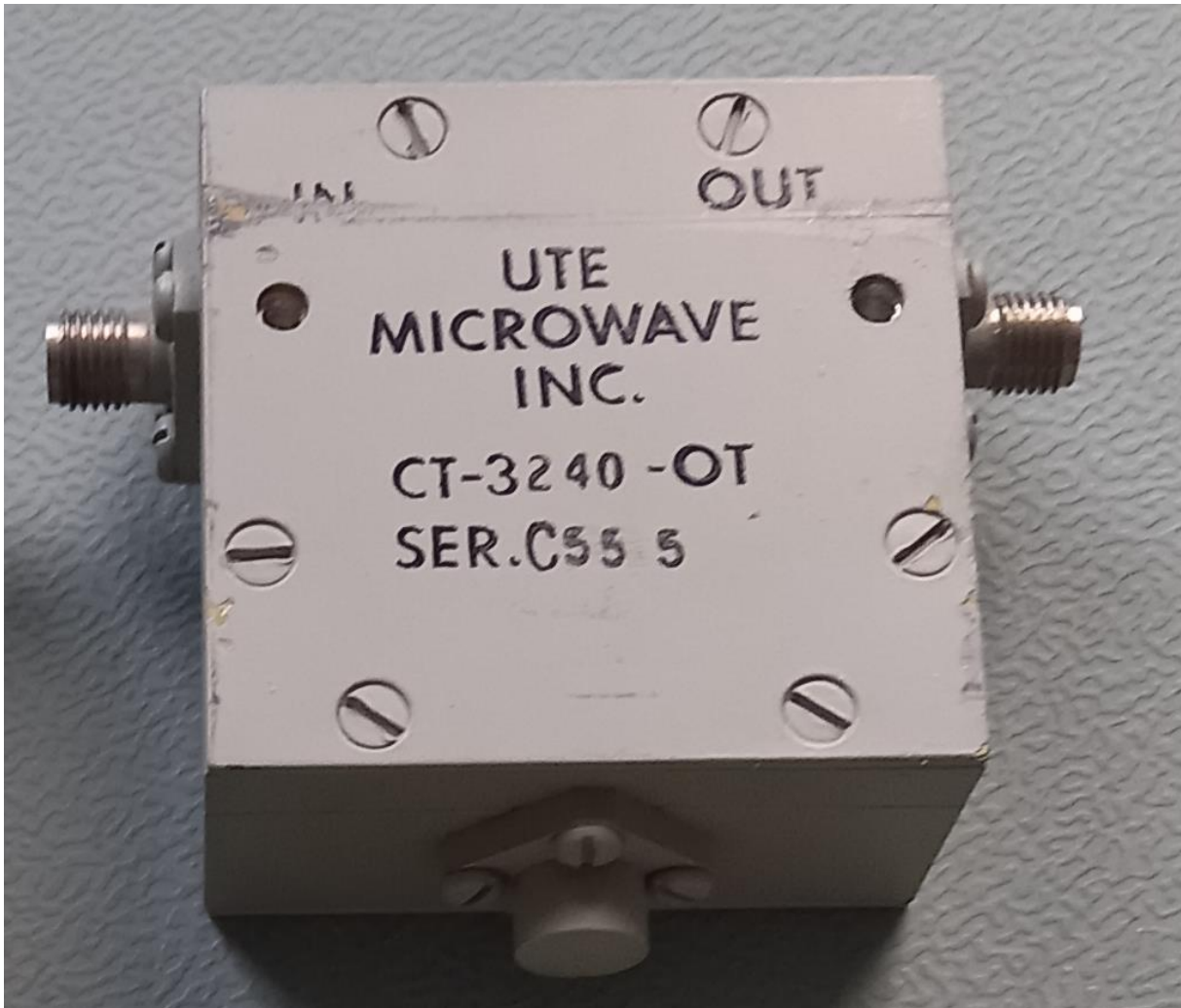
Isolation: >18 dB

Insertion Loss: <0.5 dB

VSWR: 1,3:1 max (corresponding return loss 17.7dB)

Connectors: SMA(f)

Here are some pictures of such a device:

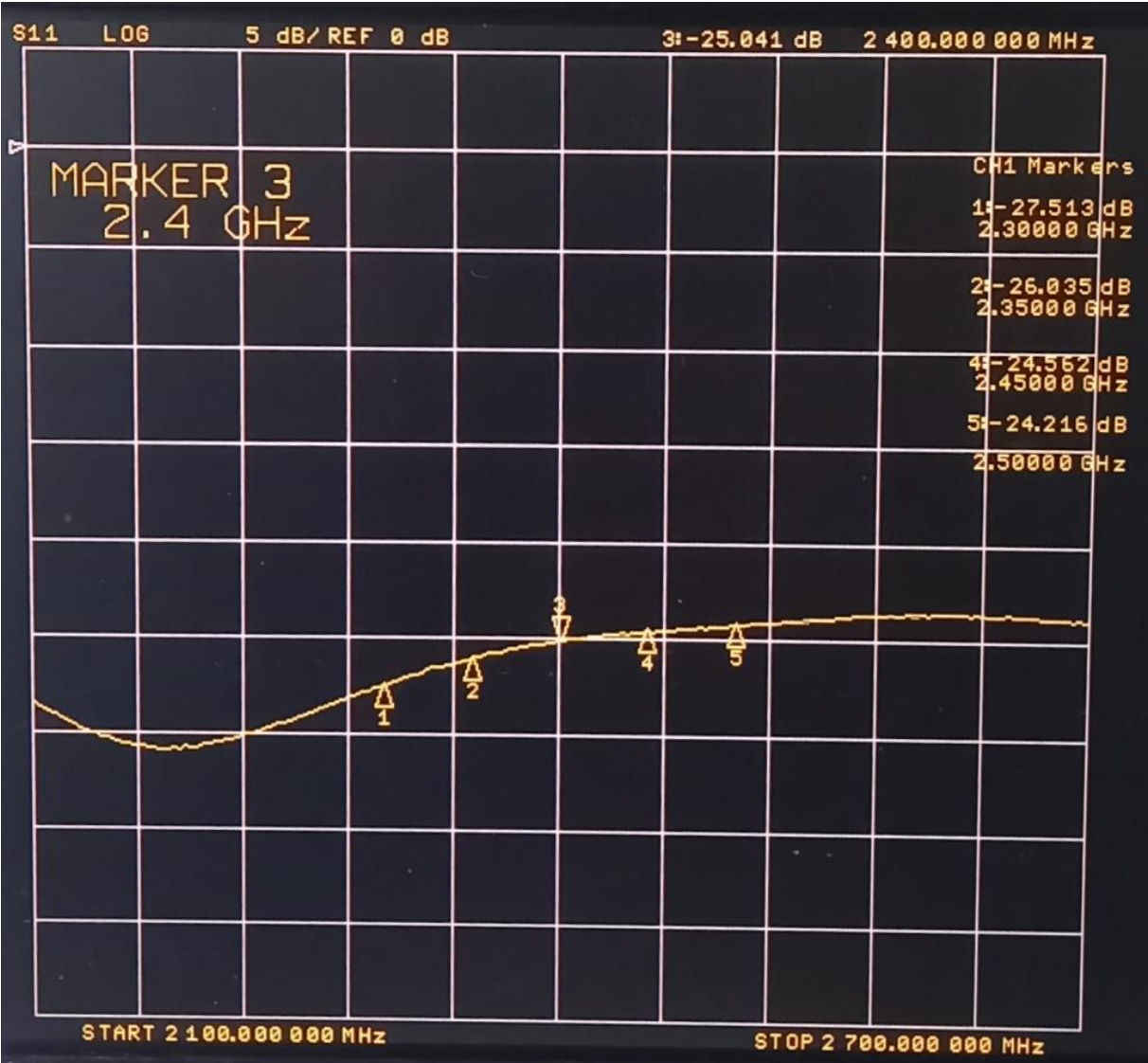


The isolator is housed in a solid metal case and has female SMA connectors at the input and output port.

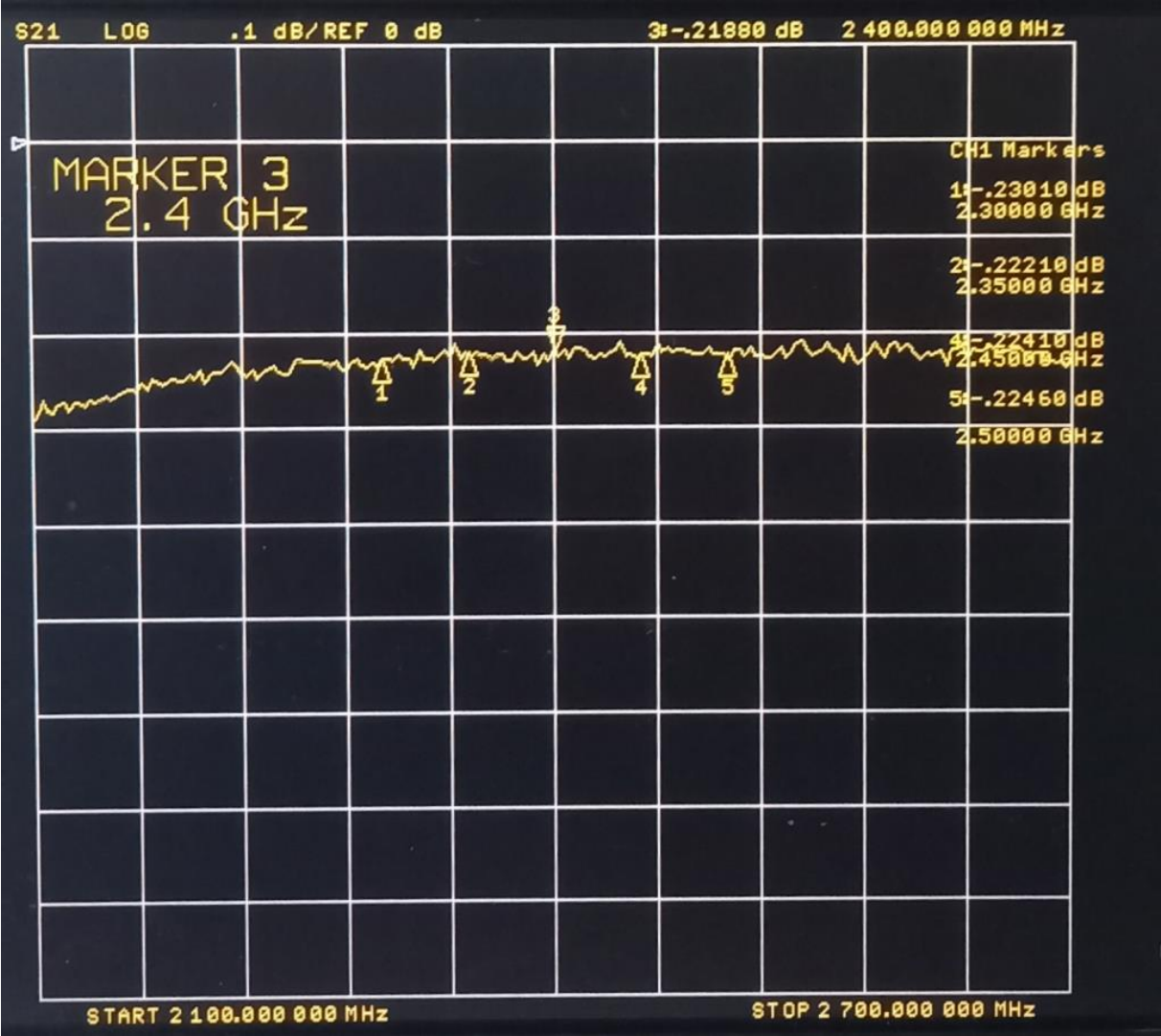
The following data is printed on the device: UTE Microwave Inc. CT-3240 OT Ser. C555

Below you will find some measurement results of this S-band isolator. All measurements were done in the frequency range 2.1GHz to 2.7GHz.

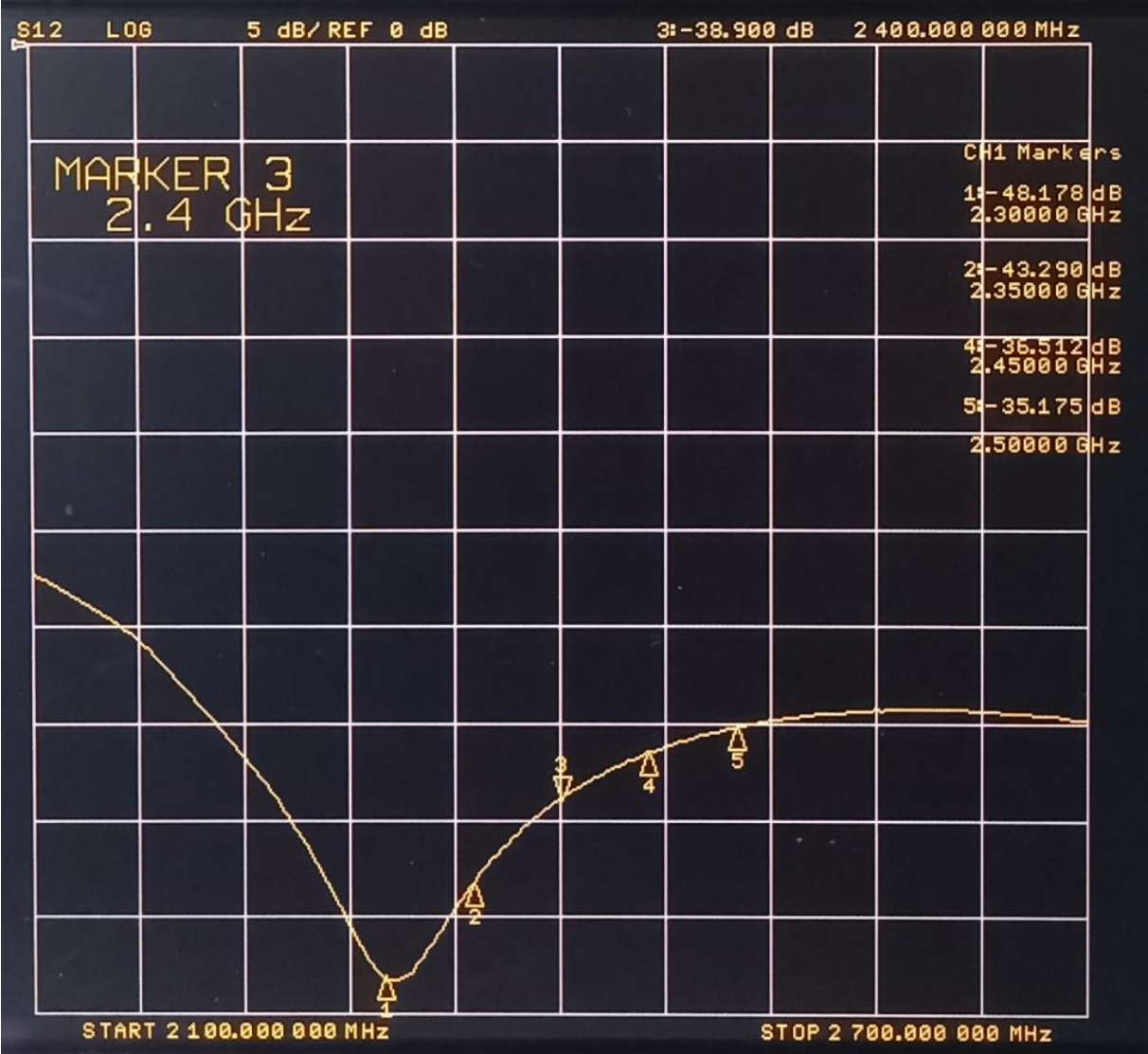
S11 input matching (return loss at 2400MHz is 25dB)



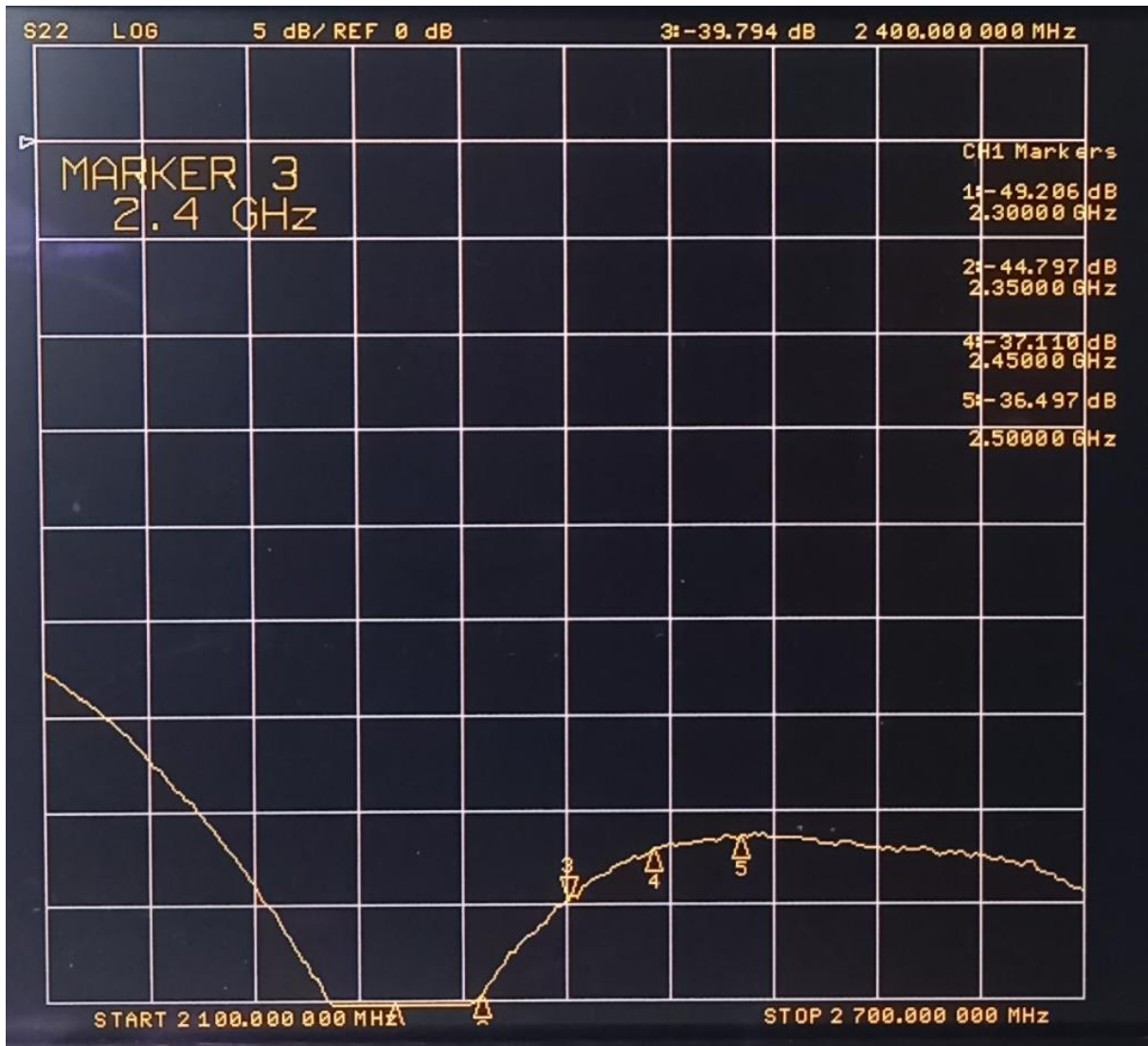
S21 forward transmission (insertion loss at 2400MHz is 0.22dB)



S12 reverse transmission (isolation at 2400MHz is >39dB)



S22 output matching (return loss at 2400MHz is 39dB)



The measurements of this isolator at 2.4 GHz are showing significant better values in all parameters compared with the specification.

I wonder what the maximum power handling of this isolator might be.

If anyone has more data then please let me know.

I will be happy to answer questions and always appreciate feedback. Many thanks in advance.

Best regards

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