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

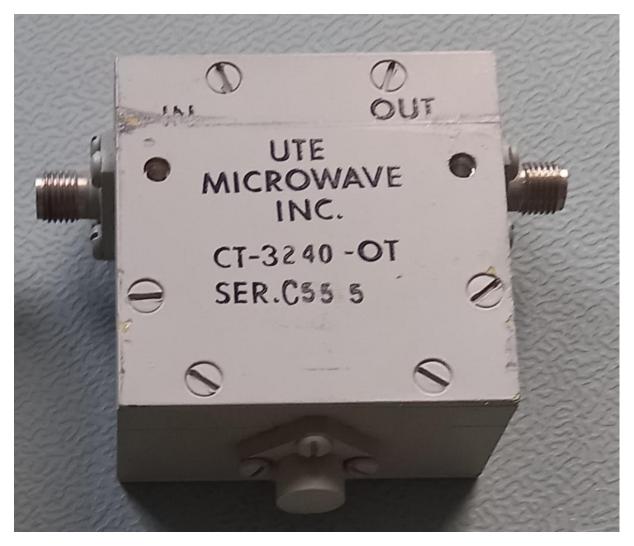
Matthias, DD1US, June 14<sup>th</sup> 2021

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

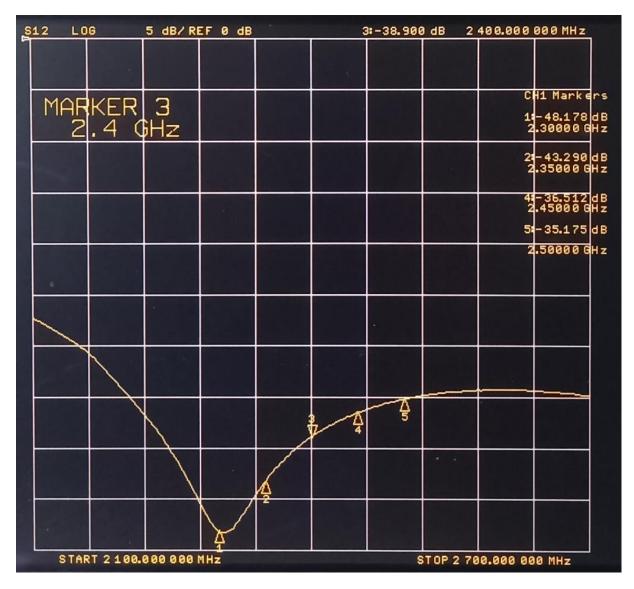
Below you will find some measurement results of this S-band isolator. All measurements were done in the frequency range 2.1GHz to 2.7GHz.

S11 LOG 5 dB/REF 0 dB 3:-25.041 dB 2 400.000 000 MHz MARKER 3 2.4 GHz CH1 Markers 1-27.513 dB 2.30000 GHz 2-26.035 dB 2.35000 GHz 4-24.562 dB 2.45000 GHz -24.216 dB 5 2.50000 GHz ₽ 흫 4 A 4 START 2 100.000 000 MHz STOP 2 700.000 000 MHz

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

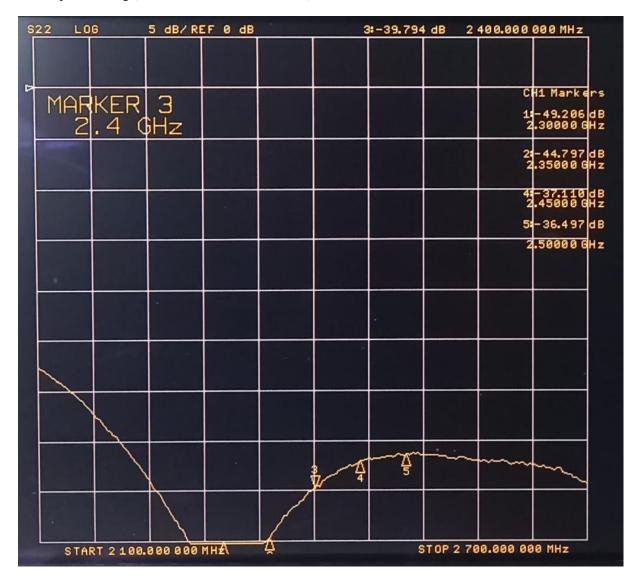
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## S21 forward transmission (insertion loss at 2400MHz is 0.22dB)



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

Matthias DD1US

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