

Product Features

- RF frequency: DC to 160 GHz
- Linear Gain: 11 dB
- Noise Figure: 8.5 dB
- Die Size: X=1040 um, Y=800 um, Z=75 um
- DC Power: 8/2 VDC, 60 mA

Application

- Point-to-Point Radios and VSATs
- Test instrumentation
- Fiber Optics
- Military, EW and Space

Product Description

The TMC774D Distributed amplifier is a broadband high gain device with positive gain slope, designed for use in Radios, Test instrumentation, Military, EW and Space applications. The TMC774D is a 50 Ω matched design providing 8dB of noise figure, offers excellent return loss at low-end for optical instrumentation, interface to photodiodes, and eliminates the need for RF port matching. Both bond pad and backside metallization are Au-based that is compatible with ribbon and wedge bonding and high conductivity epoxy and eutectic die attach methods.

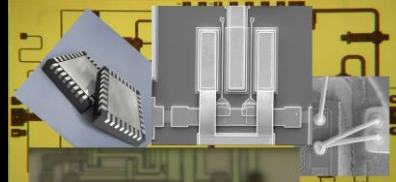
Electrical Performance : Vcc = 8 V, VBB=2V, TA = 25 °C, F = 110 GHz

	min	Typ	Max	Units
Frequency	DC		160	GHz
Gain		11		dB
P1dB		13		
Noise Figure		8.5		dB
Bias Voltage (VCC)		8		V
Bias Voltage (VBB)		2		V
Bias Current		60		mA

TMC774D

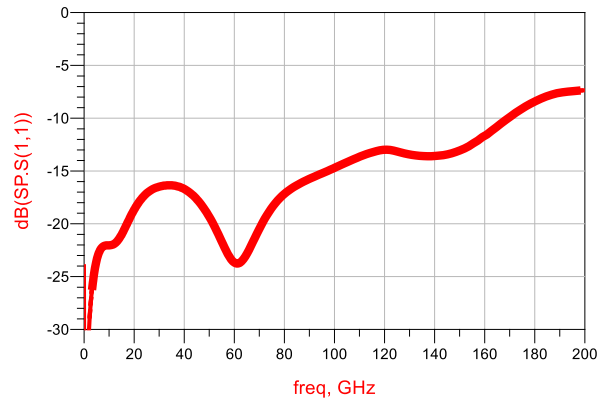
DC-160 GHz

Distributed Amplifier

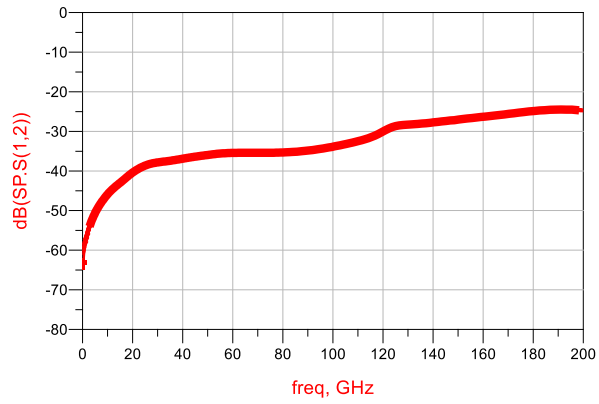


mmTRON
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mmWave Frontier

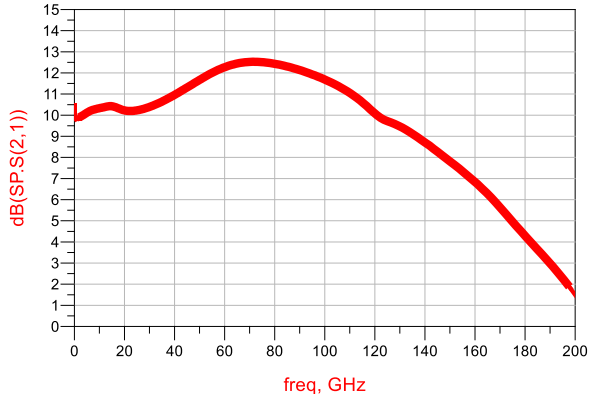
TMC774 Input Return Loss



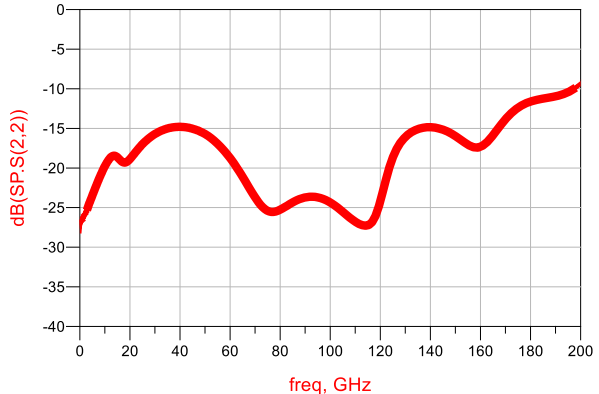
TMC774 Reverse Isolation



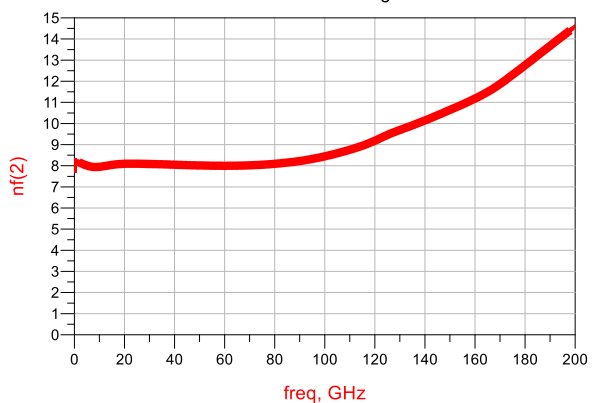
TMC774 Gain



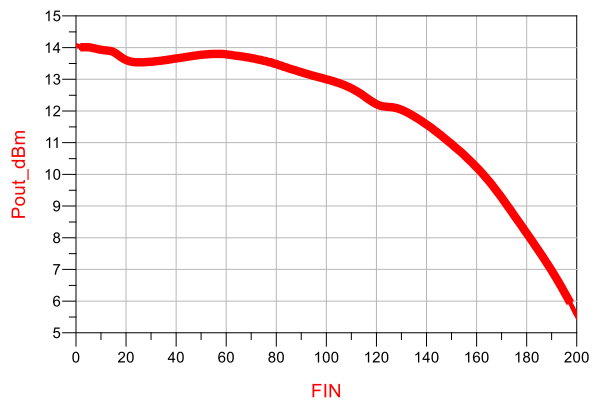
TMC774 Output Return Loss

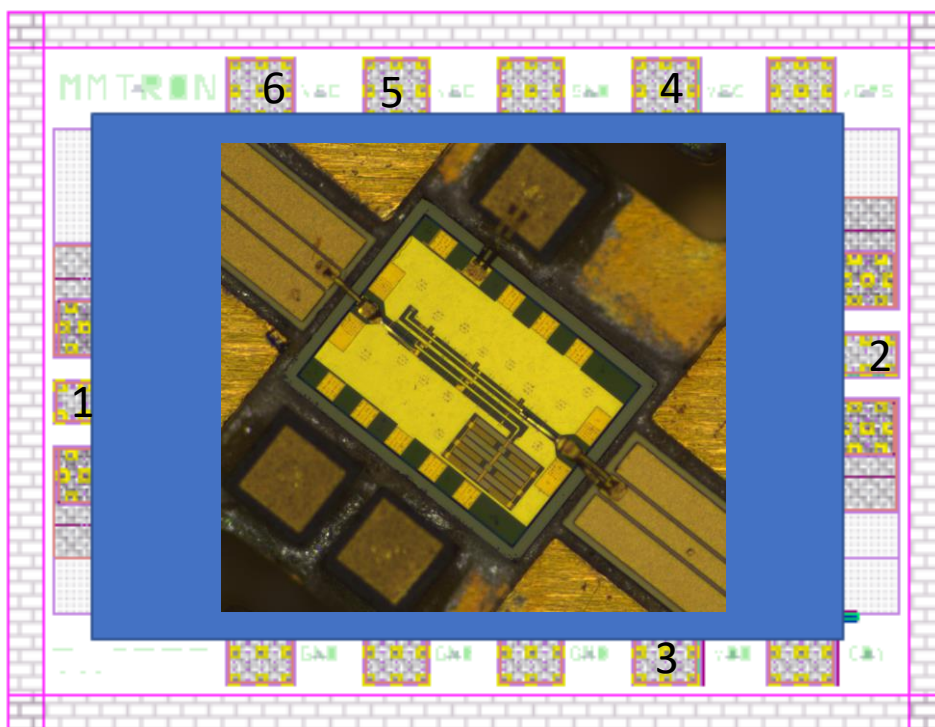
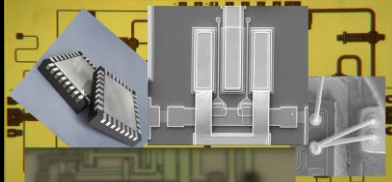


TMC774 Noise Figure



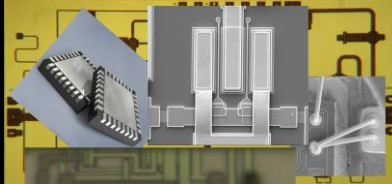
TMC774 P1dB





Pad #	Function
1	RF INPUT
2	RF OUTPUT
3	VBB
4,5,6	VCC

Note: TMC773, TMC774D and TMC775 parts have identical footprints and pad configurations.



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