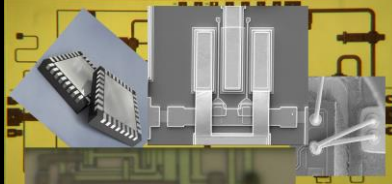


TMC2112D

25-29.5 GHz

Power Amplifier



mmTRON
Unleashing the
mmWave Frontier

Product Features

- RF frequency: 25 to 29 GHz
- Linear Gain: 17 dB
- Psat: 25 W
- Die Size: X=5.0 mm, Y=5.0 mm
- 0.15um GaN HEMT Process
- 4 mil SiC substrate
- DC Power: 18 VDC, 1.3 A

Application

- 5G Wireless
- SATCOM
- Military Radar, EW

Product Description

The TMC2112D GaN HEMT Power amplifier is a 25W two-stage Single-ended power MMIC, designed for use in 5G wireless, SATCOM and Military Radar and EW applications. The TMC2112D is a 50 Ω matched design which eliminates the need for RF port matching. To ensure rugged and reliable operation and moisture protection, the TMC2112D is designed and laid out to lower the maximum junction temperature. 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. TMC2112D can be biased from 18V to 28V to adjust output power levels in the 25W to 40W range while maintaining excellent PAE and NPR.

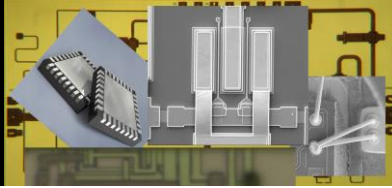
Electrical Performance : Vdd = 18 V, Vgg = -3.7 V, TA = 25 °C, F = 27 GHz

	min	Typ	Max	Units
Frequency	25		29.5	GHz
Gain		17		dB
Return Loss		10		dB
Psat		44		dBm
PAE		28		%
Bias Voltage		18		V
Bias Current		1300		mA

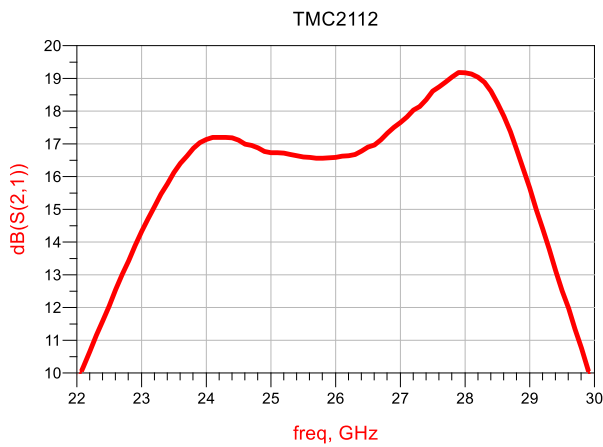
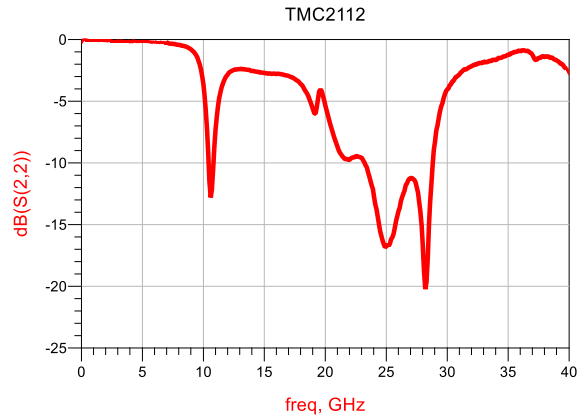
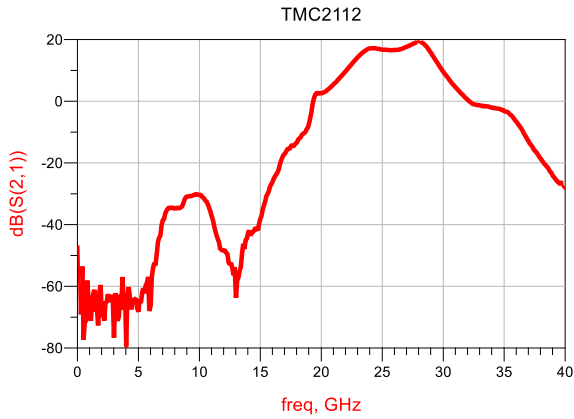
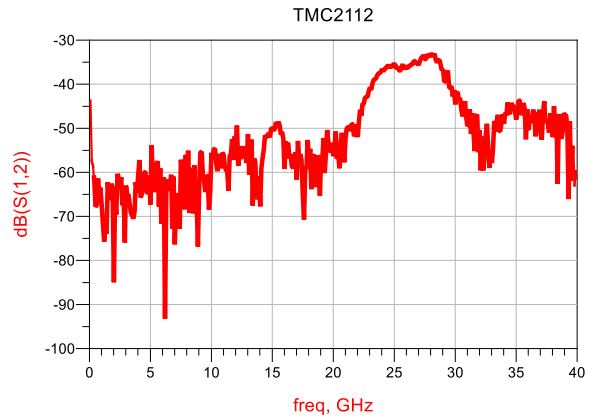
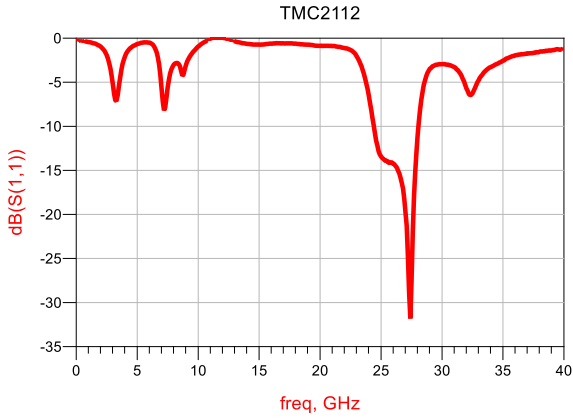
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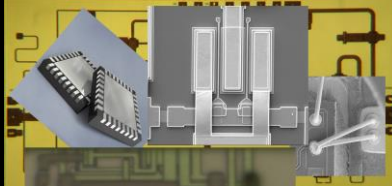
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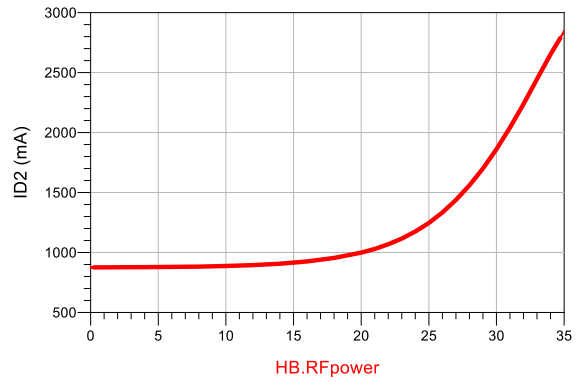
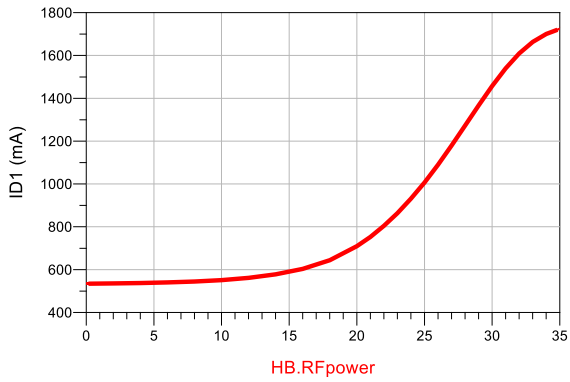
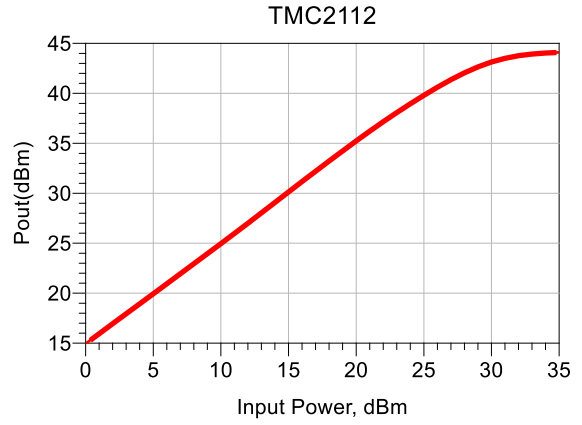
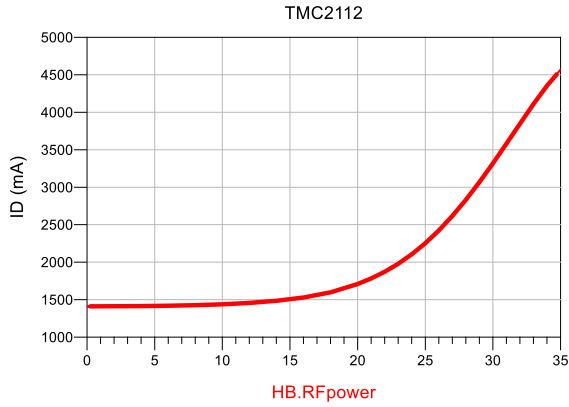
TMC2112D

25-29.5 GHz

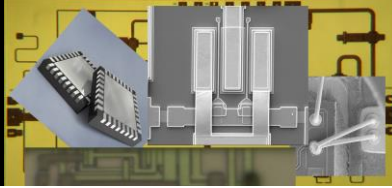
Power Amplifier



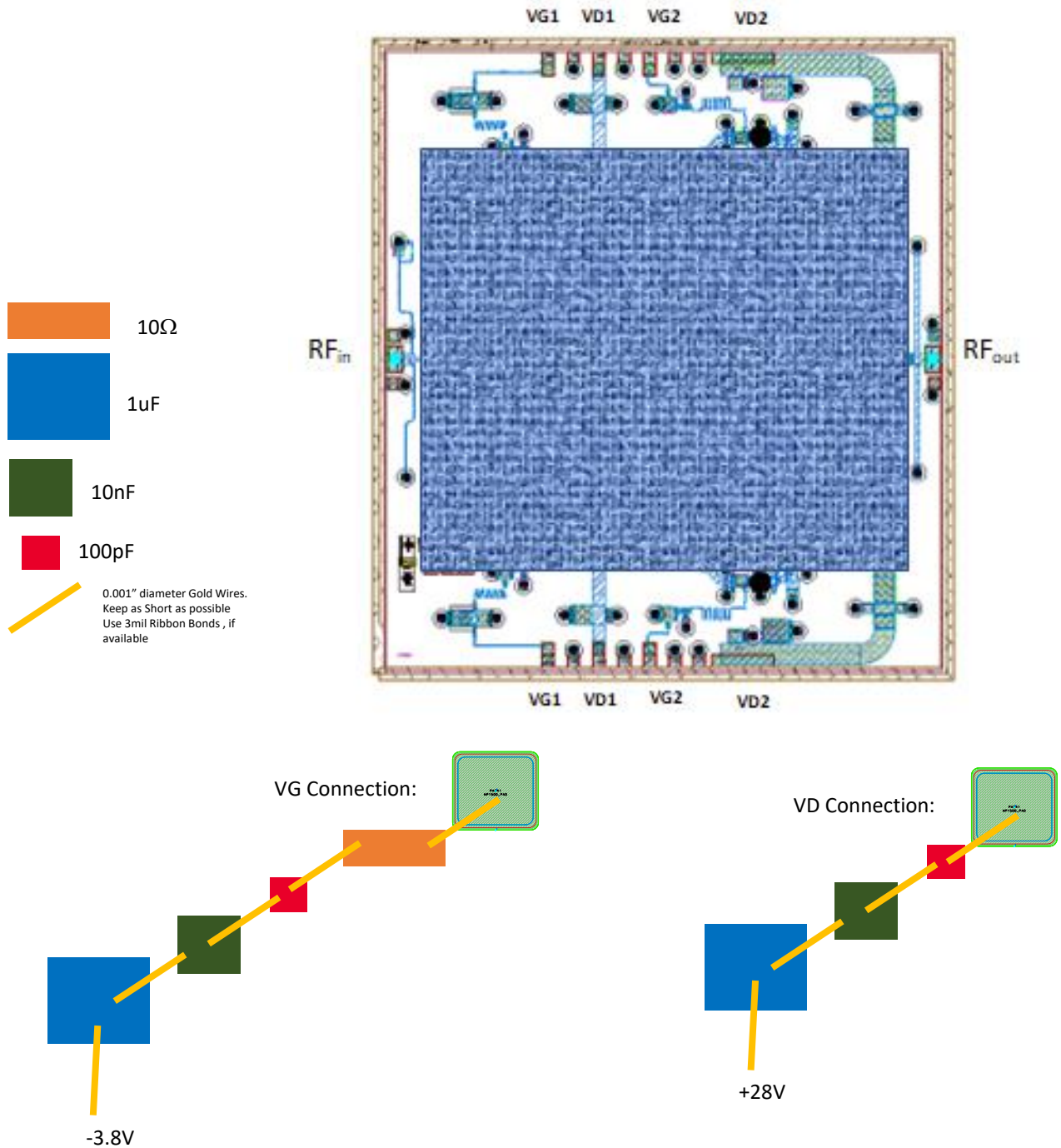
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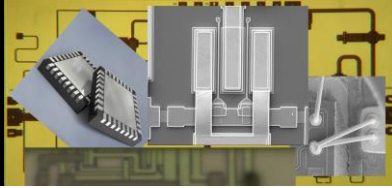
TMC2112D 25-29.5 GHz Power Amplifier



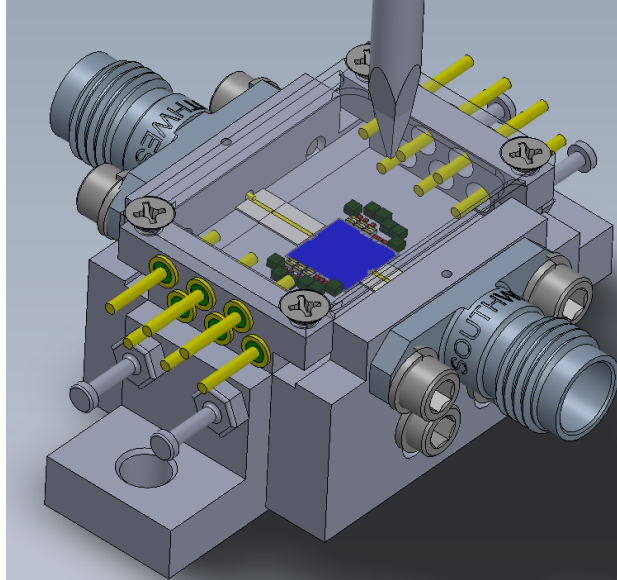
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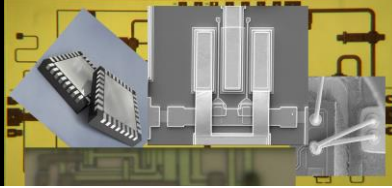


TMC2112
Evaluation
Module

TMC2112D

25-29.5 GHz

Power Amplifier



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