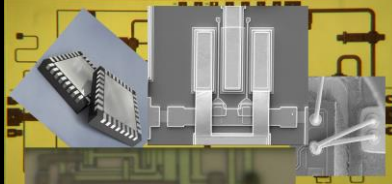


# TMC2111D

## 24.5-29 GHz

### Power Amplifier



**mmTRON**  
Unleashing the  
mmWave Frontier

## Product Features

- RF frequency: 25 to 29 GHz
- Linear Gain: 17 dB
- Psat: 40 W
- Die Size: X=5.0 mm, Y=5.0 mm
- GaN HEMT Process
- 4 mil SiC substrate
- DC Power: 28 VDC, 1.3 A

## Application

- SSPA
- Extended Range FWA
- SATCOM
- Military Radar, EW

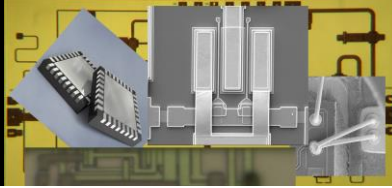
## Product Description

The TMC2111D GaN HEMT Power amplifier is a 40W two-stage Single-ended power MMIC, designed for use in 5G wireless, SATCOM and Military Radar and EW applications. The TMC2111D is a 50  $\Omega$  matched design which eliminates the need for RF port matching. To ensure rugged and reliable operation and moisture protection, the TMC2111D 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.

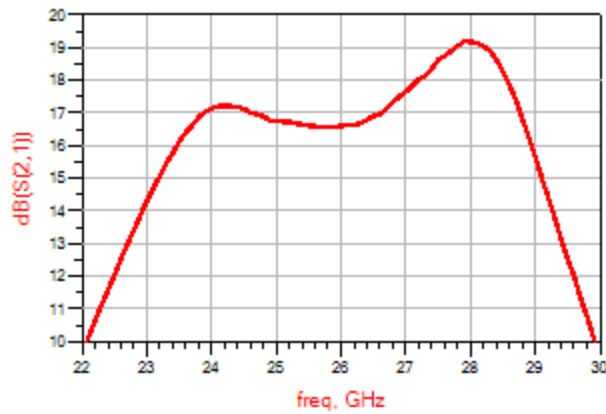
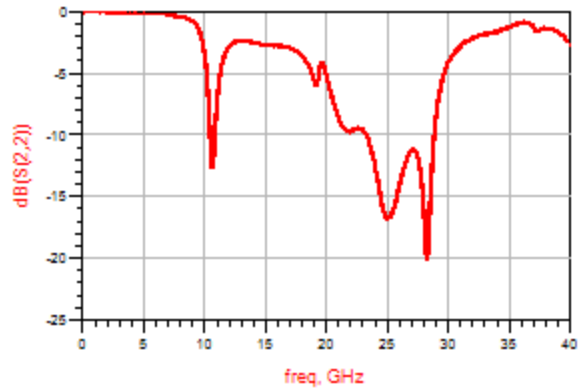
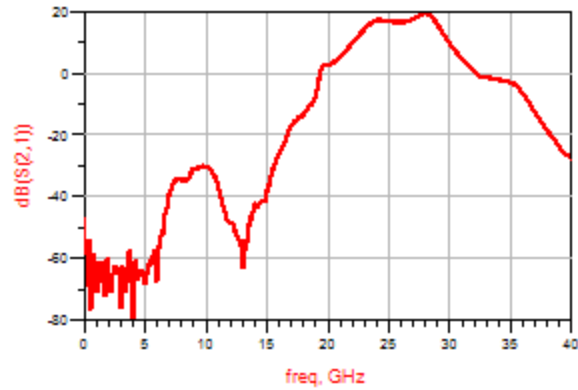
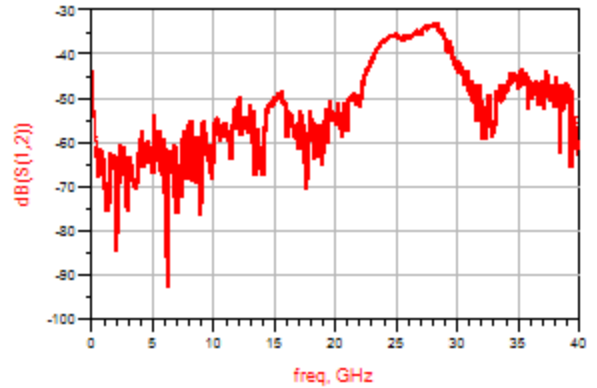
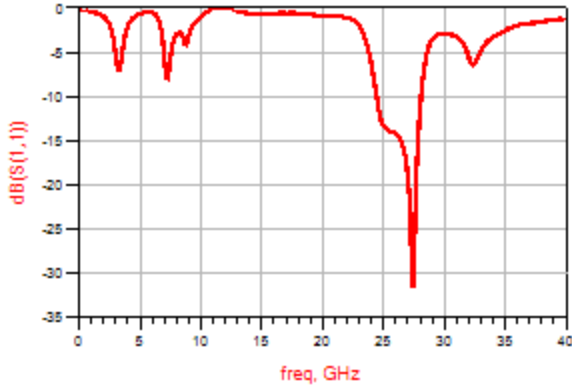
**Electrical Performance : Vdd = 28 V, Vgg = -3.7 V, TA = 25 °C, F = 27 GHz**

	min	Typ	Max	Units
<b>Frequency</b>	24.5		29	GHz
<b>Gain</b>		17		dB
<b>Return Loss</b>		10		dB
<b>Psat</b>		46		dBm
<b>PAE</b>		28		%
<b>Bias Voltage</b>		28		V
<b>Bias Current</b>		1300		mA

# TMC2111D 24.5-29 GHz Power Amplifier



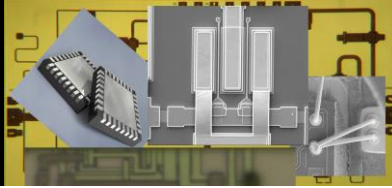
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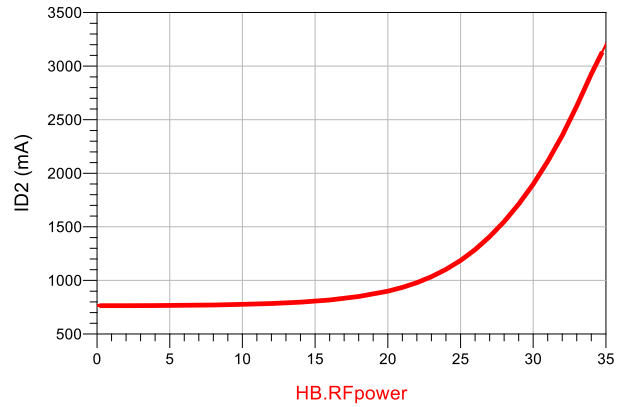
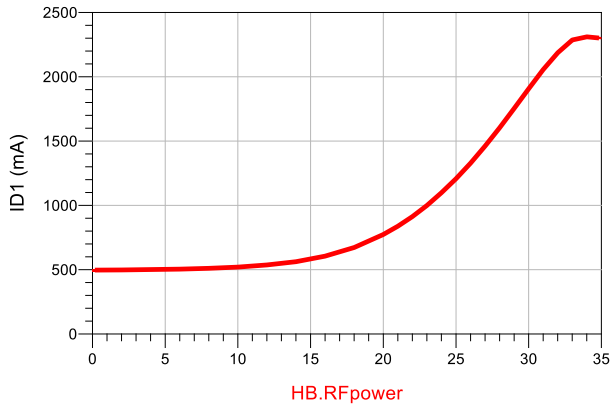
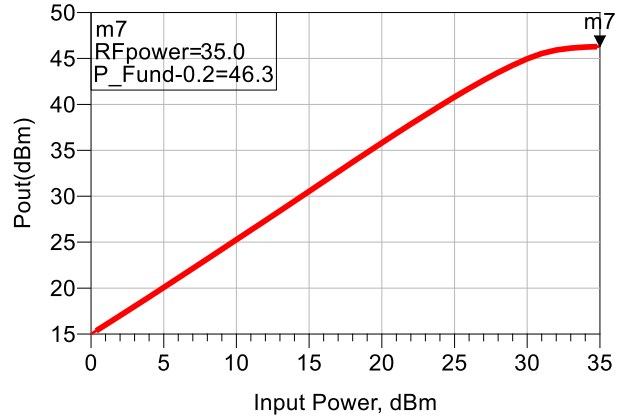
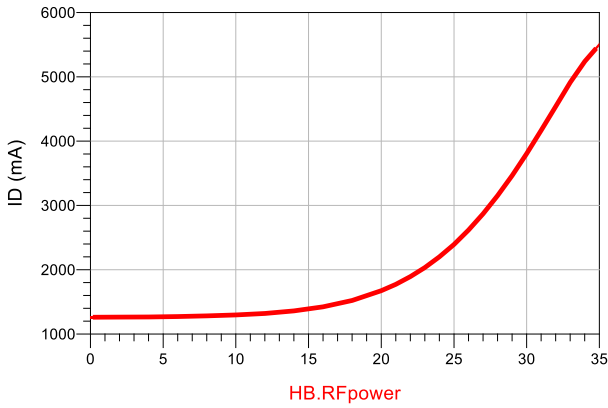
# TMC2111D

## 24.5-29 GHz

### Power Amplifier



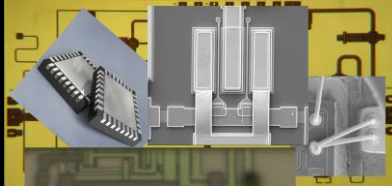
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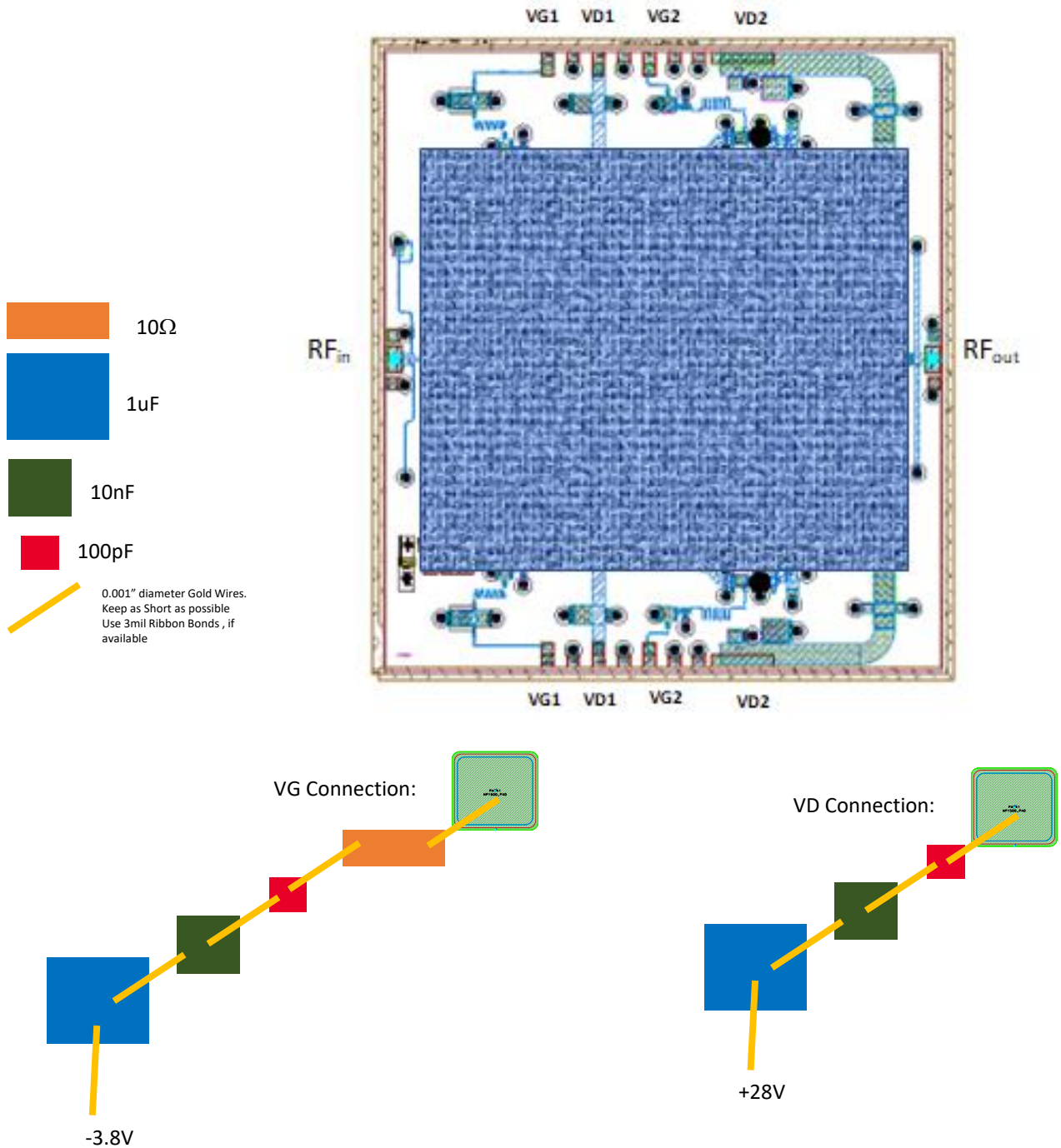
# TMC2111D

## 24.5-29 GHz

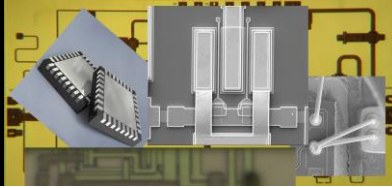
### Power Amplifier



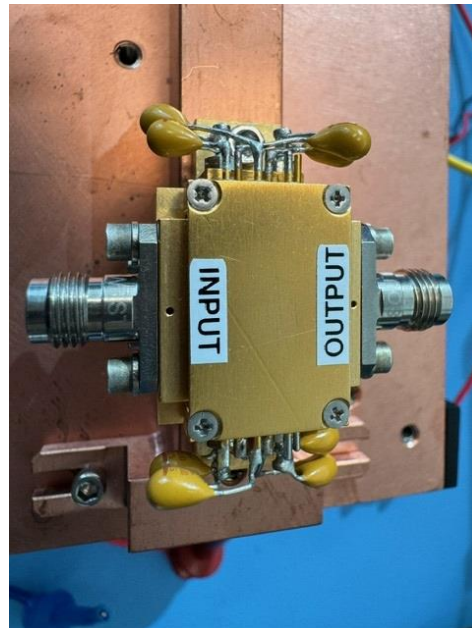
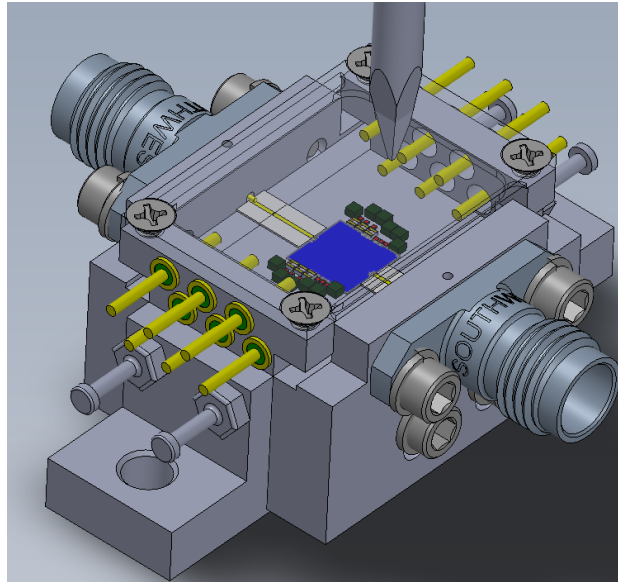
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**TMC211D**  
**24.5-29 GHz**  
**Power Amplifier**



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mmWave Frontier

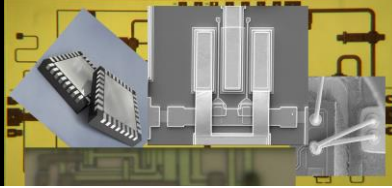


TMC2111  
Evaluation  
Module

# TMC2111D

## 24.5-29 GHz

### Power Amplifier



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