

Boost your projects with the new GaAs high power pHEMT technology available in foundry mode

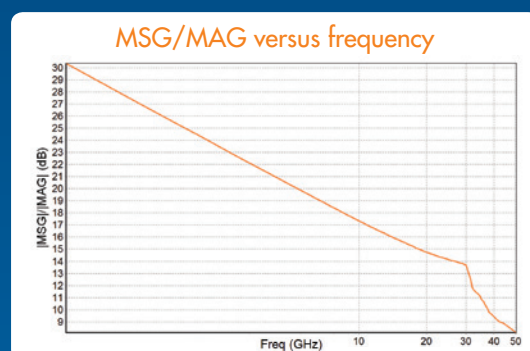
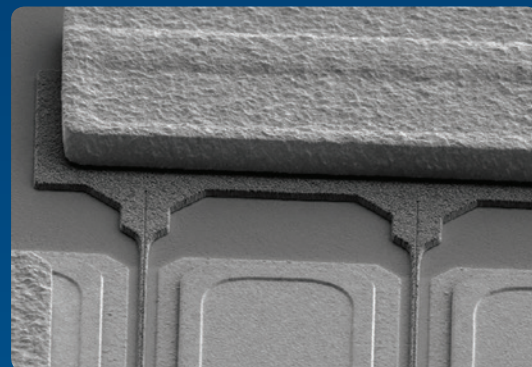
The PPH15X process is optimized for wideband high power amplification up to 45GHz. It features an excellent power capability at high frequency up to 800mW/mm@3dB compression with a PAE of 46% and a very high linearity with an IMR3 of 56dBc@10dB backoff.

It includes two metal interconnect layers, precision TaN resistors, high value TiWSi resistors, MIM capacitors (high density and over-via), air bridges and backside via holes.

PPH15X is available with BCB encapsulation.

Applications:

- VSAT
- Point to Point radio
- Fiber optics
- Instrumentation



Parameter	Typical value
Power Density	800 mW/mm
Gate length	0.15µm
Ids@gm Max	350mA/mm
Ids Sat	575mA/mm
V _{BDS}	>12V
Cut off frequency	70GHz
V pinch	-0.95V
Gm Max	480mA/mm
Noise/Gain@freq	1.8dB / 6dB @ 40GHz
M.I.M. capacitors	250pF/mm ² (standard density) 625pF/mm ² (High density)
TaN Resistor	30Ω/sq
TiWSi Resistor	1000Ω/sq
GaAs Resistor	100Ω/sq
Substrate thickness	70µm



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