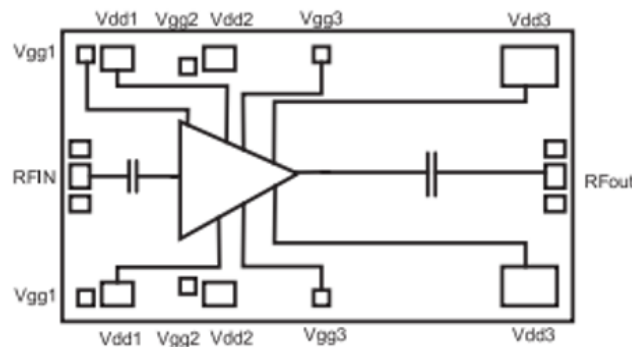


Features

- Frequency: 12-18GHz
- Gain: 21.5dB
- P1dB: +37.5dBm
- OIP3: +45dBm
- Power Supply: +8V@2.8A
- Die Size : 5.3x 5.7 x 0.1 mm

Typical Applications

- Test Instrumentation
- Microwave Radio & VSAT
- Military & Space
- Telecom Infrastructure
- Fiber Optics

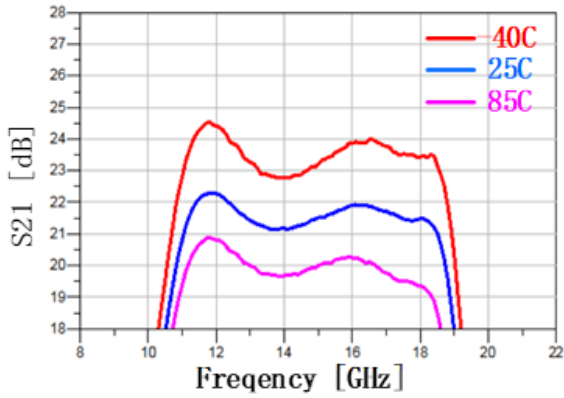
Functional Block Diagram

Electrical Specifications

TA = +25°C, Vd1 = Vd2 = +8V, Vg1 = Vg2 = -0.7V , Id1 + Id2 = 2.8A

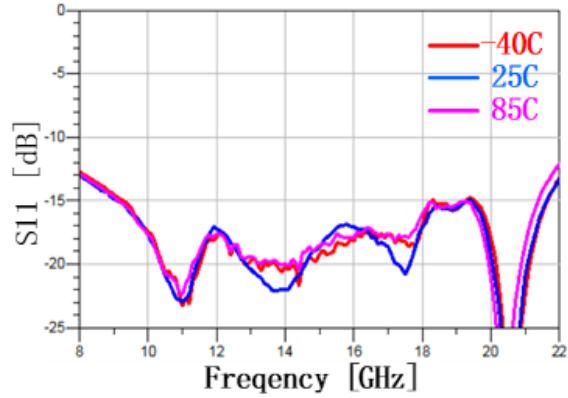
Parameters	Min.	Typ.	Max.	Units
Frequency	12-18			GHz
Gain	21	21.5		dB
P1dB	37.5	37.8		dBm
Psat		38	39	dBm
PAE@Psat		26	28	%
OIP3		45		dBm
Input Return Loss		17		dB
Output Return Loss		17		dB
Operating Current (@Vd = 8V)		2.8		A



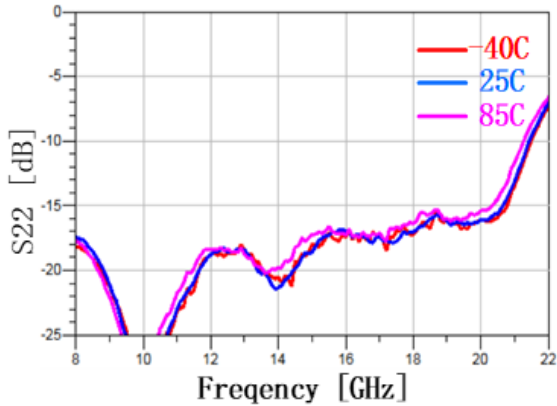
Gain vs. Temperature



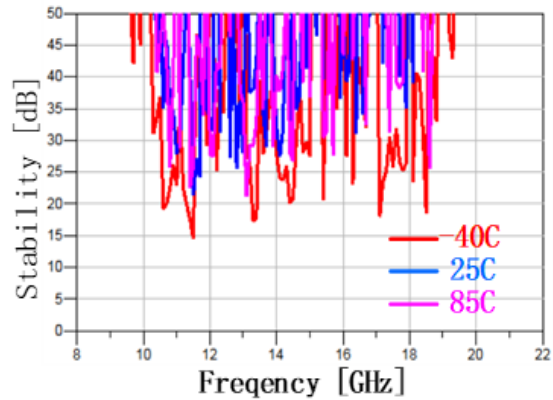
Input Return Loss vs. Temperature



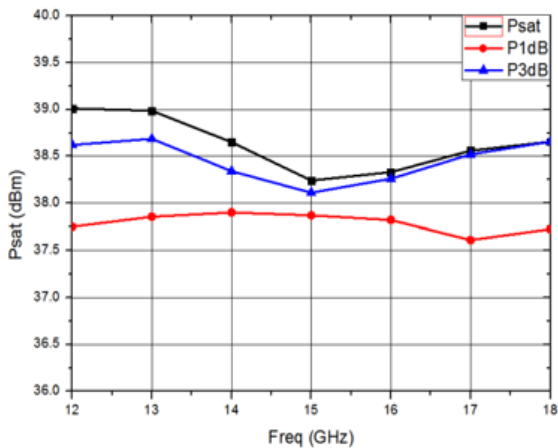
Output Return Loss vs. Temperature



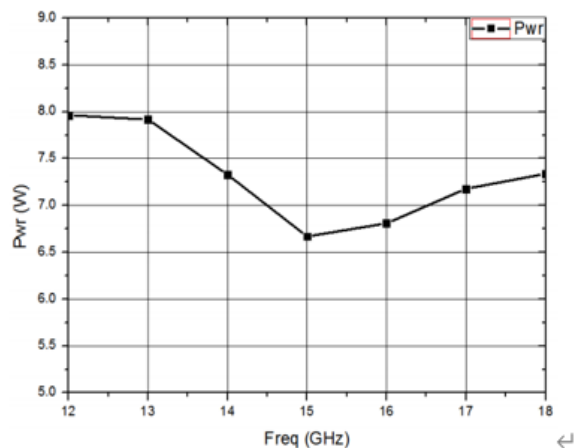
Stability vs. Temperature



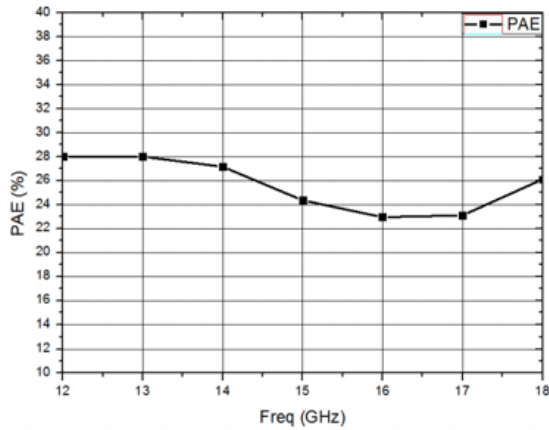
P1dB, P3dB, Psat



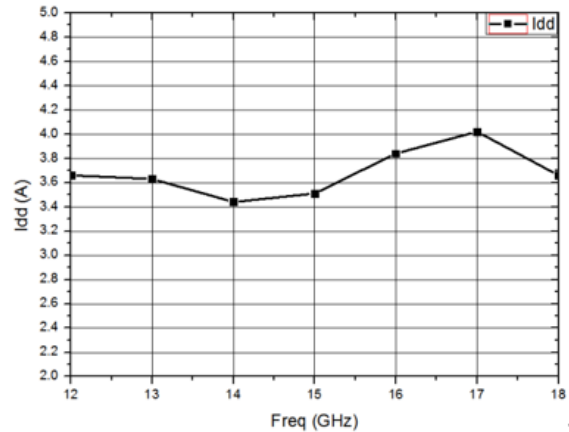
Pwr



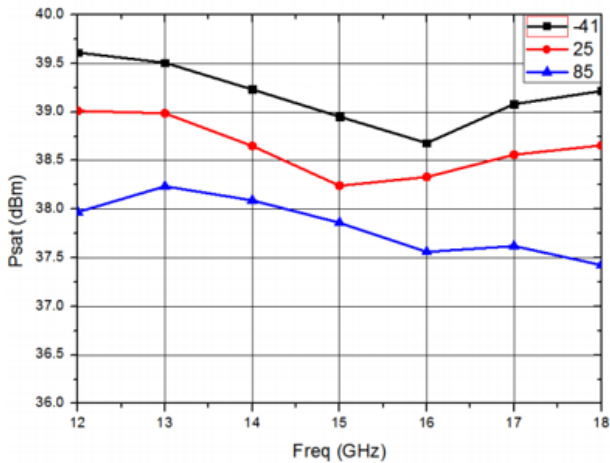
PAE@Psat vs. Frequency



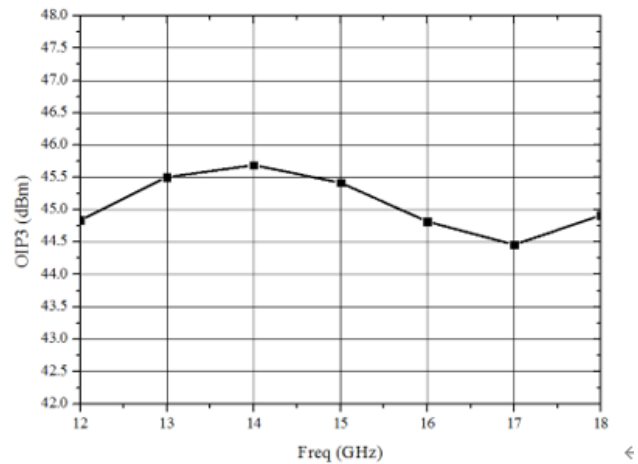
Current @Psat vs. Frequency



Comparison of high and low temperature Psat

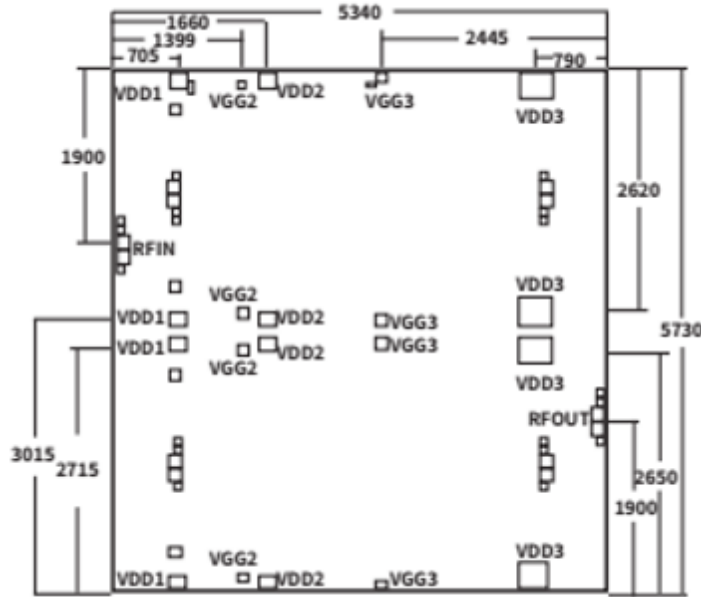


OIP3 vs. Frequency (Pout/Tone = 24dBm)





Outline Drawing: All Dimensions in μm



Assembly Drawing (Bond testing)

