

Features

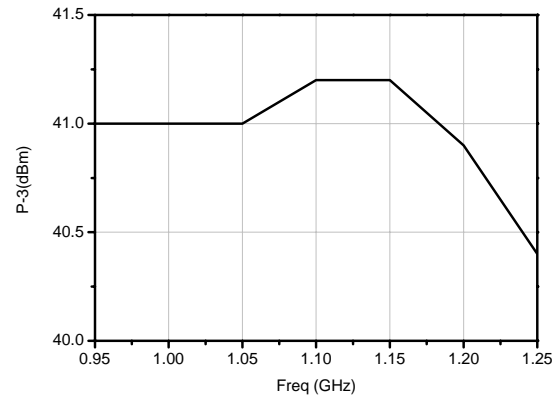
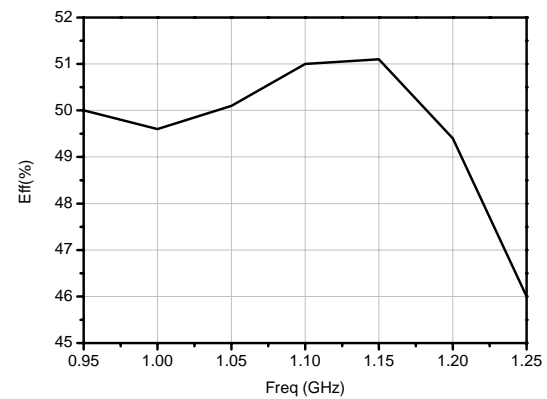
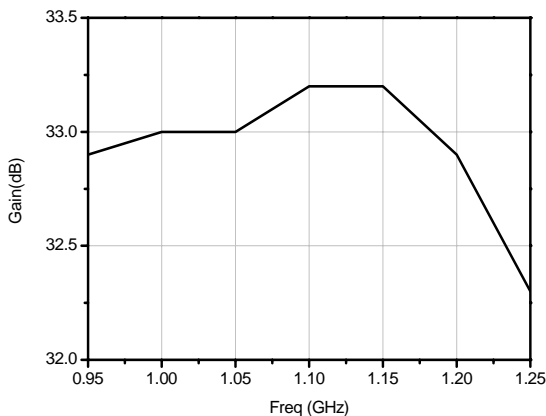
Freq: 0.96~1.25GHz
 Power Gain: 32dB
 Output P_{3dB}(P_{3dB}): 41dBm
 PAE@P_{3dB}(PAE_{3dB}): 45%
 2nd/3rd Harmonic: -35dBc
 Supply Voltage: +28V(V_{dd}), -2.4V(V_{gg})
 Chip Size: 22mm×19mm×5.5mm

General Description

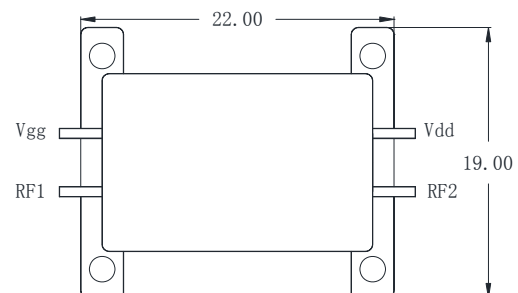
The HG523FA-F08 is an internally-matched GaN HEMT operating between 0.96 and 1.25GHz. The module has been optimized to provide 32dB gain, 41dBm output power for 3dB compression, and 45% efficiency at P_{3dB}.

Electrical Specifications(T_A=25 °C, V_{dd}= 28V).

Parameter	Min.	Typ.	Max.
Freq(GHz)	0.96~1.25		
Gain (dB)	—	32	—
Gain Flatness (dB)	—	±0.5	—
Input VSWR	—	2	—
Output VSWR	—	2	—
P _{3dB} (dBm)	—	41	—
PAE _{3dB}	—	45%	—
2 nd /3 rd Harmonic(dBc)	—	-35	—

Output Power for 3dB Compression

PAE@P_{3dB}

Measured Performance
Power Gain

Absolute Maximum Ratings

Supply Voltage	+36V
RF Input Power	+15dBm
Operating Temperature	-55 °C ~ 125 °C
Storage Temperature	-65 °C ~ 150 °C

Outline Drawing (mm)(Package: QF136GC)


Notes:

1. The module should be stored in a dry and nitrogen environment, and used in a clean environment.
2. The pin of the module is brittle, easy to break by external force ,so must be careful when using.
3. The feeder line of the gate and drain need a decoupling capacitor of 10uF, the absolute voltage should not less than 50V.
4. GaN devices are susceptible to damage from electrostatic discharge, proper precautions should be observed in use.