



VCO

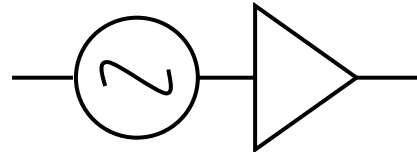
GEV03

Description

The **GEV03** is 15 to 20 GHz broadband VCO designed on 2 um GaAs HBT process. The device is designed for high frequency applications. The resonator part is split into on-chip inductor and off-chip varactor. The GEV03 consumes only 3.5 mA current.

The phase noise of the GEV03 can be improved using the high Q off chip resonator.

Functional Diagram



Applications

- Digital Radio
- VSAT
- Multipoint Radio Systems
- LMDS (Local Multipoint Distribution Services)

Key Features

- Broadband VCO
- Low Phase Noise
- Low Current, Low Cost
- Operating Temperature 0 to 85 °C Range

Electrical Specification

Conditions: $V_{cc} = 4.2\text{ V}$ & $T_A = 25\text{ }^\circ\text{C}$

Parameter	Min	Typical	Max	Units
Frequency Range	15		20	GHz
Pout		6		dBm
Phase Noise				
@ 10 kHz	-42			dBc
@ 100 kHz	-62			dBc
Input Reflection Coefficient				
@ 15 GHz		5		dB
@ 20 GHz		5.5		dB
Operating Current		3.5		mA
Supply voltage		4.2		V



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Simulated Results

