HMC1069

32Gbps Optical Modulator Driver

No Image Available

Product Details

Request Data Sheet
ECCN: EAR99

Quality & Reliability

Waffle-Pak & Gel-Pak

Press & Media

Product Press Release

Life Cycle Status

Production, Recommended for New Designs

Data Rate (Gbps)	Function	Gain (dB)	Group Delay Variation (ps)	Additive Jitter (ps)	Output Voltage Max. (Vp-p)	Package
32	32Gbps Optical Modulator Driver	15	±5	0.3	7.5	Chip

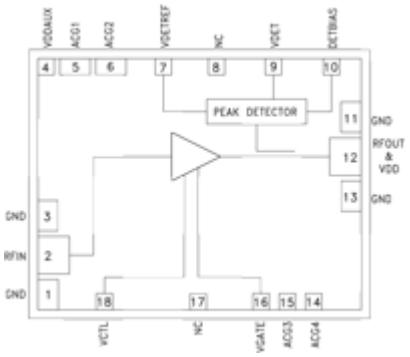
Features

- Low DC Power Dissipation, 0.70W for 6Vpp output swing at 5V and 1W for 7.5Vpp swing at 6V supply.
- Integrated peak-detect function
- High gain, 15dB at 16GHz
- Low Additive RMS Jitter, <300 fsec
- High Bandwidth, 12 psec Rise and Fall Times
- Small Die Size: 1.71 x 1.35 x 0.10 mm

Typical Applications

- Up to 32Gbps optical modulator driver
- Test and Measurement Instrumentation
- Microwave Radio & VSAT
- Military & Space

Functional Diagram



General Description

The HMC1069 is a broadband distributed amplifier optimized for time-domain performance with high bandwidth supporting data-rates up to 32Gbps.The output signal amplitude and cross point are adjustable through the control pins and the integrated peak detector feature is used for monitoring the output voltage signal levels during device's normal operation.
The HMC1069 is designed in GaAs MMIC PHEMT process and the device can support supply (Vdd) voltage range from 5V to 7V with excellent performance.
HMC1069 can be used as a post-stage driver in cascaded configuration when HMC1068 is utilized as pre-stage amplifier. HMC1069 can also be used as a single-stage driver to address aplications with lowoutput swing requirements.
The HMC1069 comes in a small die size and need minimal number of external components for decoupling only , which makes it well suited for driver integrated optical modulator chip-and-wire assemblies.

Hittite Microwave (Chelmsford, MA USA) is an ISO 9001:2008 and AS9100:2009 Certified Designer and Manufacturer
© 2000 - 2014 Hittite Microwave Corporation | Legal Notice | Privacy Policy
978-250-3343 | sales@hittite.com