HMC7150LP3DE

28 Gbps EML Driver



| Data Rate | Function | Gain | Group Delay | | Output Voltage Max. | Package |
|--|-----------------------|---|----------------|------|------------------------------------|-------------------------------------|
| (Gbps) | | (dB) | Variation (ps) | (ps) | (Vр-р) | |
| 28.3 | 28 Gbps EML Driver | 13 | ±7 | 0.27 | 2.2 | LP3D |
| Features | | Typical Applications | | | Functional Diagram | |
| Operation up to 28.3 Gbps Low DC Power Dissipation, 0.12W for 1.5Vpp swing @ 3.3V supply 0.50W for 2.3Vpp swing @ 6V supply Adjustable Output Amplitude from 1.2Vpp to 2.3Vp 16 Lead 3x3mm SMT Package: 9 mm2 | | 100Gb Ethernet ER4/ LR4 systems CFP/CFP2/CFP4 or similar form factor modules Optical transceivers and pluggable modules Broadband gain stages and pre-amplifiers Broadband Test & Measurement Equipment | | | VDD 1 GND 2 GND 4 5 6 7 8 | 12 GND 11 OUT 10 GND 9 GND |

General Description

The HMC7150LP3DE is a broadband driver amplifier for electro-absorption modulated lasers (EML) and supports data-rates up to 28.3Gbps to meet the 100Gb Ethernet system requirements. The part provides the module designers scalable power dissipation for varying drive voltage characteristics of different modulators and the power consumption of the module can be set as low as 0.12W to 0.5W at 1.5Vpp and 2.3Vpp outputs amplitudes, respectively. The HMC7150LP3DE supports wide range of supply voltages from 3.3V to 6V and delivering excellent time domain performance. The output amplitude and cross-point can be adjusted via control pins. The input and output are 50 Ohms matched and used AC coupled. The HMC7150LP3DE is in compact leadless 3x3mm surface mountable package.

PACKAGE

BASE GND