

HTT3002 / 3001

Active-CMF for MIPI

Wide-Band Active Common-mode Canceller for MIPI

General Description

HTT3002 is LVDS-adaptive cable extension IC of power supply 2.8V using 0.18um CMOS process. This IC passes to broadband to DC - 3000MHz and realizes common-mode noise cancellation more than 25dB. By wideband common mode cancellation function and the impedance matching by the built-in 50 Ω output driver, it can compress the phase error of the differential signal. In addition, an EMC design is simplified and it provides an equalizer function to improve the precision of the signal. This IC dispenses with CMF of the passive type that was necessary for a transmission line and provides stable CMR in all frequency band.

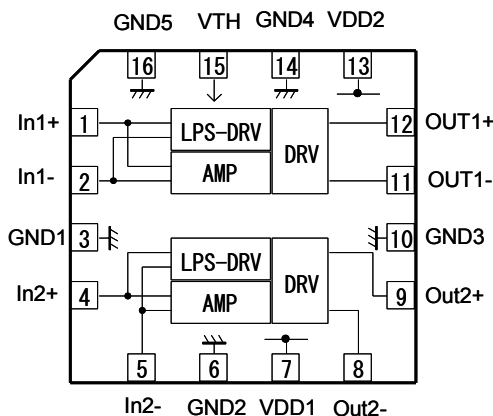
2 data lanes are built in HTT3002. And, HTT3001 has 1 data lane.

This IC achieves HBM=6000V.

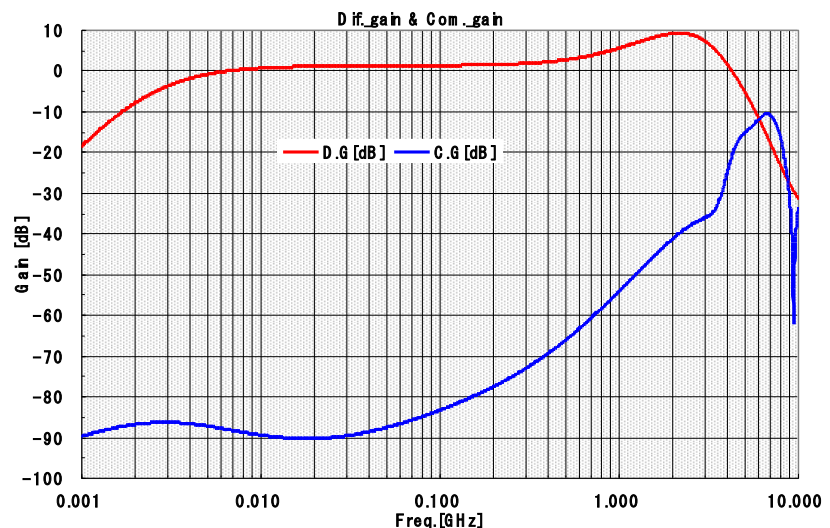
Features (HTT3002)

- power consumption 129mW (TYP. Ta=25°C) (V_{DD}=2.8V, I_{DD}=46.0mA)
- Output return-Loss > 18dB (@2000MHz, 50 Ω)
- Input return-Loss > 20dB (@2000MHz, 50 Ω)
- Differential Gain : 1.5dB (@ 100 MHz)
- CMRR : > 30 dB (@1000 MHz)
- HBM : > 6000V
- Operating temperature range : -40°C ~ +125°C
- Storage temperature range : -55°C ~ +125°C
- PKG: QFN16 (2.3mm × 2.3mm)

Pin & name



Frequency characteristics



Application Note

