

# HTT3101

## Wide-Band Active Common-mode Canceller for HDMI

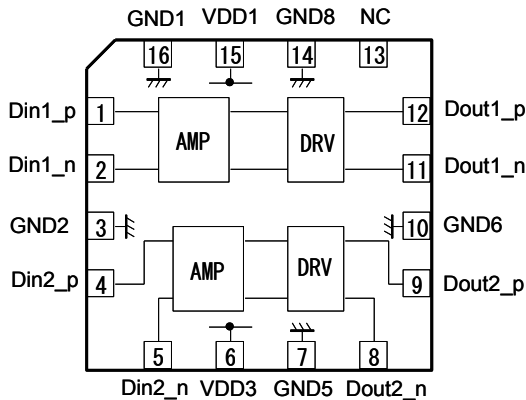
### General Description

HTT3101( using 0.18 $\mu$  CMOS process) is active common mode cancellation IC for HDMI with 3.3V power supply. This IC decreases the in-phase component at all frequencies , which conventional passive CMF(common mode filter) cannot achieve. It will ensure more than 30dB CMRR at 2000MHz. So, this IC can cancel imbalance of the differential data signals and a phase error as well. That will eliminate the errors by connection of equipment or by subtle difference of length of the transmission line on the PCB. It will lead to the simplification of the design of EMC and will raise the purity of the differential data signals. The active CMF can be used at lower frequencies and can present low-height and very small CMF. It is beneficial to the reduction of your board space. • 50ohm drivers are built in. • HBM > 6000V

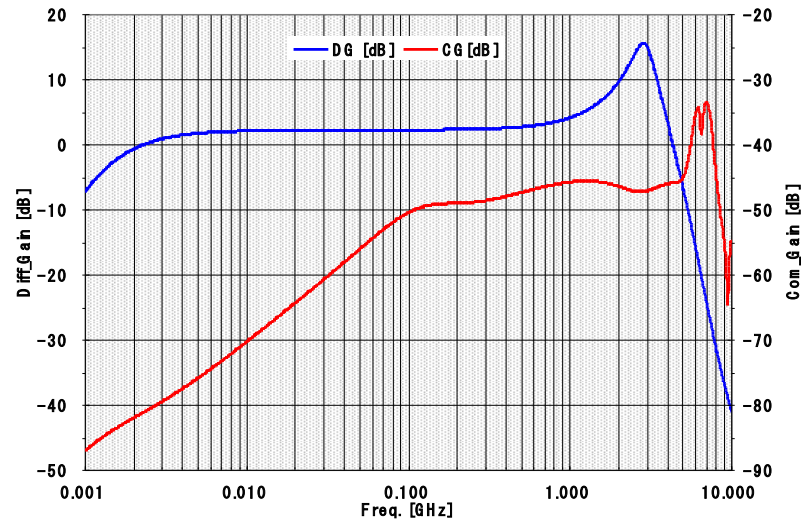
### Features

- power consumption 150mW (TYP. Ta=25 $^{\circ}$ C) ( $V_{DD}$ =3.3V,  $I_{DD}$ =45.0mA)
- Operating temperature range : -40 $^{\circ}$ C ~ +105 $^{\circ}$ C
- Output return-Loss > 18dB (@1000MHz)
- Input return-Loss > 25dB (@1000MHz)
- Differential Gain : 2.5dB (@ 1000MHz)
- CMRR1 : > 35 dB (~1000 MHz) • CMRR2 : > 30 dB (@1800MHz)
- HBM : > 6000V
- PKG: QFN16 ( 2.3mm $\times$ 2.3mm )

### Pin & name



### Frequency characteristics



### Application Note

