

EMI2121

EMI Common Mode Filter with ESD Protection



Product Overview

For complete documentation, see the data sheet.

The EMI2121 is an integrated common mode filter providing both ESD protection and EMI filtering for high speed serial digital interfaces such as USB2.0. The EMI2121 provides EMI filtering for one differential data line pair and ESD protection for one data pair plus a supply input such as USB2.0 Vbus or USB ID pin. It is supplied in a small RoHS compliant WDFN8 package.

Features

- Highly Integrated Common Mode Filter (CMF) with ESD Protection provides protection and EMI Reduction for systems using high speed Serial Data Lines with cost and space savings over Discrete Solutions
- Large Differential Mode Bandwidth with Cutoff Frequency > 2 GHz
- High Common Mode Stop Band Attenuation: >25 dB at 700 MHz, >30 dB at 800 MHz Typical
- Provides ESD Protection to IEC61000-4-2 Level 4, 12 kV Contact Discharge
- Low Channel Input Capacitance Provides Superior Impedance Matching

Benefits

- Integration of ESD and Filter function
- Rejects cellular transmit frequencies
- Rejects cellular transmit frequencies
- High level ESD protection
- Low capacitive loading

Applications

- USB2.0 and other High Speed Differential Data Lines in Mobile Phones and Digital Still Cameras
- MIPI DPHY

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Interface	Number of Lines	Filter Type	R Typ (Ω)	C Typ (pF)	I _R Max (μA)	V _(BR) Typ (V)	V _{RWM} Max (V)	Package Type
EMI2121MTTAG	0.3833		Active	USB 2.0	3	Common Mode	8	0.8	1	7.25	5	WDFN-8
SZEMI2121MTTAG	0.4007		Active	USB 2.0	3	Common Mode	8	0.8	1	7.25	5	WDFN-8