

# CMI Series Common Mode Injectors



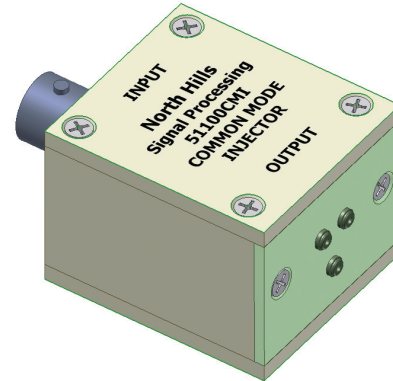
## Data Sheet

CMI Series Common Mode Injectors serve to introduce a longitudinal signal into a balanced system to facilitate a variety of tests. These include balance to ground, susceptibility to noise, and common mode rejection.

Specialized instrumentation devices, such as the LBB and BF Series have built-in common mode injection circuits. However, under certain circumstances, a stand-alone common mode injector may be required. As an example, Fig.1 shows a CMI Series Device in a test setup to measure the common mode rejection of a balun transformer.

Fig. 2 shows a CMI device in a test setup for a two-port measurement of longitudinal balance in conjunction with a Series LBB Longitudinal Balance Bridge.

*Note: Common Mode Injectors are not available as a stand along unit. They must be purchased with a matching Longitudinal Balance Bridge.*



North Hills CMI Series Common Mode Injector

### Features:

- 60 dB minimum inherent balance
- 100, 110, 120, 135, or 150 ohm devices available
- Ideally matched to Longitudinal Balance Bridge counterpart

### Benefits:

- Ideal for 2-port UTP cable measurements (LCTL Test)
- Easily interfaces with 50 ohm and 75 ohm network analyzers
- Excellent balance across a broad frequency range

## Technical Drawing

Figure 1. Common Mode Rejection Test

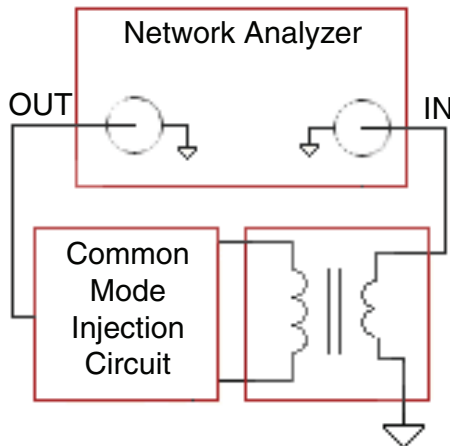
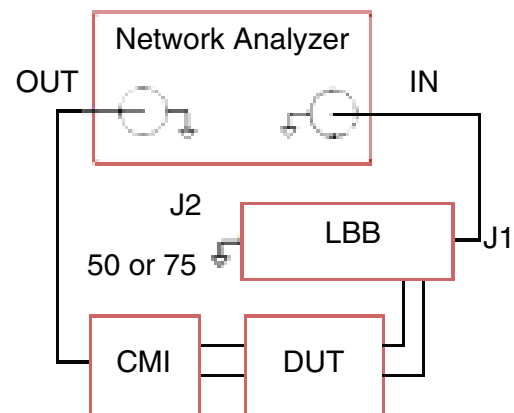


Figure 2. Two-Port Balance Test Circuit



For more information: [www.BTTC-Beta.com/CMISeries](http://www.BTTC-Beta.com/CMISeries)



## Ordering Information

Balanced Impedance ohm	Common Mode Source	
	50 ohm Part#	75 ohm Part#
<b>10kHz-30MHz</b>		
100	51100CMI	71100CMI
110	51110CMI	71110CMI
120	51120CMI	71120CMI
135	51135CMI	71135CMI
150	51150CMI	71150CMI
<b>0.1-100MHz</b>		
100	52100CMI	72100CMI
110	52110CMI	72110CMI
120	52120CMI	72120CMI
135	52135CMI	72135CMI
150	52150CMI	72150CMI
<b>1-300MHz</b>		
100	53100CMI	73100CMI
110	53110CMI	73110CMI
120	53120CMI	73120CMI
135	53135CMI	73135CMI
150	53150CMI	73150CMI

Specifications subject to change without notice

## Specifications

### Mechanical Specifications: (unless otherwise specified)

#### 53XXXCMI

Case Material	Extruded Aluminum 6063
Case Finish	Clear Anodized
Connector (Source)	SMA, Bulkhead, Jack
Test Terminals	Sockets for $\phi$ .040 (18 GA.) PINs

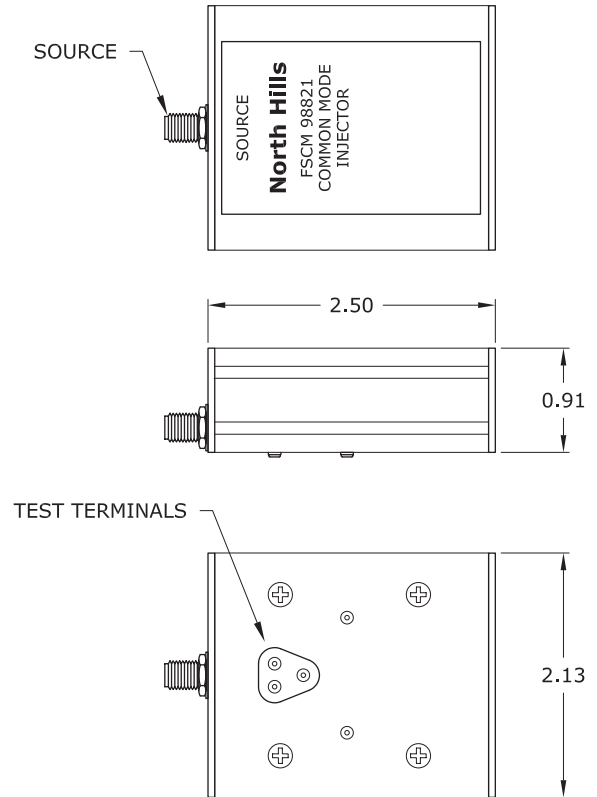
#### 51XXXCMI, 52XXXCMI

Case Material	Extruded Aluminum 6061
Case Finish	Yellow Alodine
Connector (Source)	BNC, Bulkhead, Jack
Test Terminals	Sockets for $\phi$ .040 (18 GA.) PINs

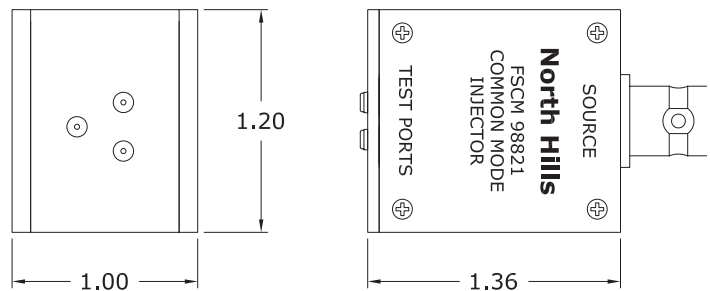
## Technical Drawings

### Case Styles

#### 53XXXCMI



#### 51XXXCMI / 52XXXCMI



The information in this Brochure is believed to be accurate; however, no responsibility is assumed by Beta Transformer Technology Corporation for its use, and no license or rights are granted by implication or otherwise in connection therewith. Specifications are subject to change without notice.

### For ordering assistance and technical support,

E-Mail: [service@BTTC-Beta.com](mailto:service@BTTC-Beta.com)

Visit: [BTTC-Beta.com](http://BTTC-Beta.com)    Data Device Corporation

Call: HQ, N.Y., U.S.A (631) 224-7393

UK +44-(0)1635-811140  
France +33-(0)1-41-16-3424  
Germany +49-(0)89-1500-12-11  
Japan +81-(0)3-3814-7688  
Asia +65-6489-4801  
India +91 80 46797 0368

