

Miniature SMPTE 292M Video Balun Transformer



Data Sheet

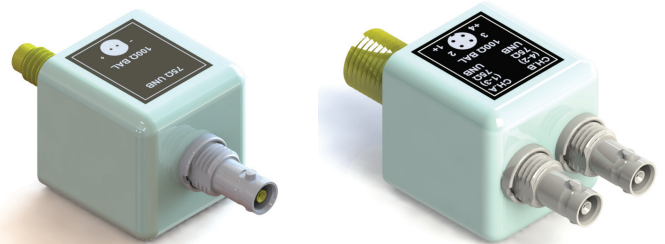
North Hills 75 ohm to 100 ohm video balun transformers provide an easy and straightforward means of connecting a 100 ohm balanced circuit to a 75 ohm coaxial cable. They are primarily designed for use in SMPTE 292M video networks

The baluns match impedance in either direction and are precision-engineered for low insertion and excellent return loss and have a wide bandwidth extending from 1 MHz to 1.5 GHz.

*North Hills Application Note 151 - "Wideband Transformers" provides further information on the subject of balun transformers.

Features:

- Miniature size for easy integration
- Ideal for SMPTE 292M video data networks
- Insertion Loss 1.2 dB typical
- Return Loss >10dB from 5MHz to 1.2 GHz
- Rise and Fall Times less than 170 ps
- Low Deterministic and Peak-to-Peak Jitter
- Bi-directional signal path



North Hills Single and Dual Output SMPTE 292M Balun Transformers

Benefits:

- Easily connects twinax or quadrax cable to coaxial cable
- Small size for use in tight spaces
- Lightweight, ideal for weight sensitive applications
- Operating Temperature: -55°C to +125°C

Specifications

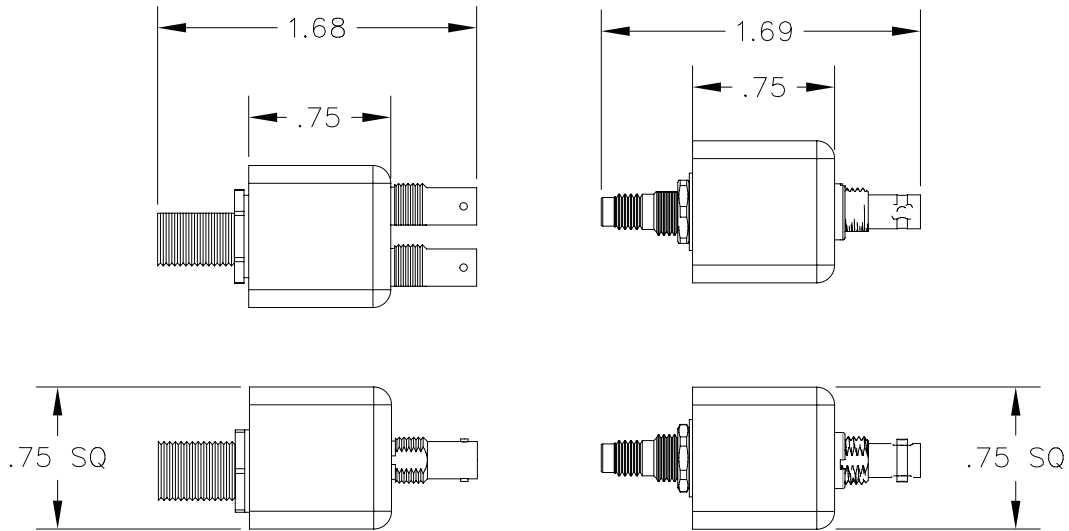
Electrical @ 25°C								
Part Number	Impedance Input	Impedance Output	Insertion Loss 5MHz-1.2GHz	Return Loss 5MHz - 1.2GHz	Bandwidth (3dB)	Rise/Fall Time (20%-80%)	Deterministic Jitter (p-p)	Peak-to-Peak Jitter
BTDM1485VB7510XX-1	75Ω	100Ω	1.2dB typ. 2dB max.	12dB min.	1MHz-1.5GHz	90ps typ. 130ps max.	20 ps max.	30 ps max.
BTDM1485VB7510XX-2	75Ω	100Ω	1.2dB typ. 2dB max.	12dB min.	1MHz-1.5GHz	150 ps typ. 170 ps max.	30 ps max.	40 ps max.

Mechanical:					
Part Number	Case/Cover	Finish	Weight	Input Connector	Output Connector
BTDM1485VB7510-1	Cold Rolled Steel, Hot Solder Dipped	Blue, Semi-Gloss Enamel per TT-E-529	30 grams max	Micro HD BNC, Jack 75Ω	Micro Twinax, 100Ω Sabritec 014117-5000 mates with Sabritec 014034-20xx
BTDM1485VB7510-2	Cold Rolled Steel, Hot Solder Dipped	Blue, Semi-Gloss Enamel per TT-E-529	30 grams max	Micro HD BNC, Jack 75Ω	Quadrax 100Ω Sabritec 012817-5002 mates with Sabritec 012735-20xx

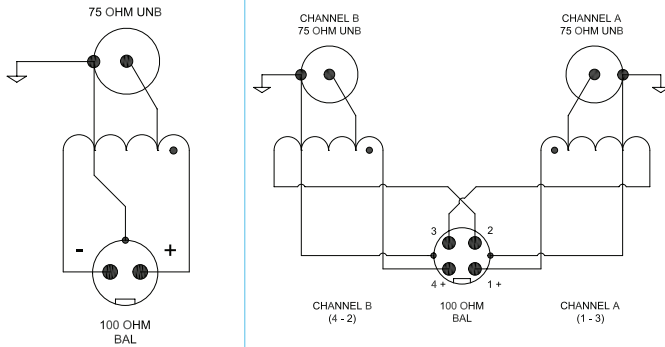


For more information: www.BTTC-Beta.com/MiniSMPTE

Mechanical Outline



Schematics

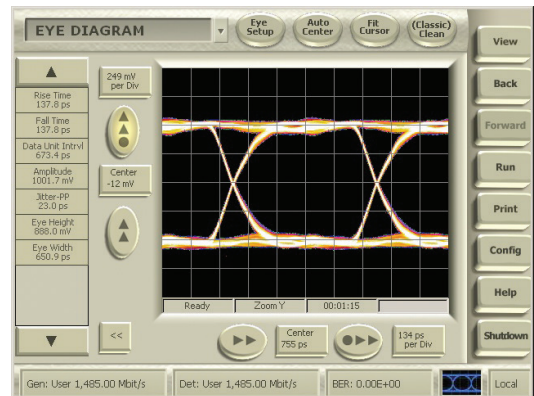


BTDM1485VB7510XX-1

BTDM1485VB7510XX-2

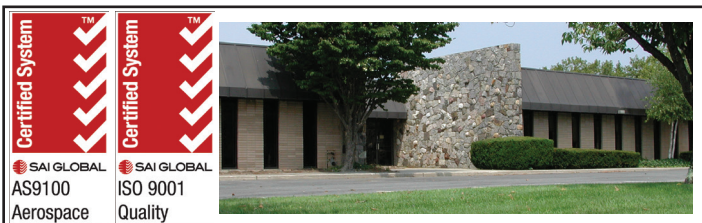
Typical Eye Diagrams

1.485 Gbps Data Rate, PN7 Pattern



Ordering Information

Model	Impedance	Part Number
Single Output	75Ω Unbalanced/100Ω Balanced	BTDM1485VB7510-1
Dual Output	75Ω Unbalanced/100Ω Balanced	BTDM1485VB7510-2



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,

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