

Box-Type, Multi-Stub Data Bus Coupler



Data Sheet

North Hills manufactures a full line of multi-stub couplers for MIL-STD-1553 with up to 8 transformer coupled stub ports and industry standard connectors.

All North Hills couplers provide 55 dB common mode rejection (CMR) and are packaged in a hot-tinned cold rolled steel case which is solder-sealed for superior environmental, EMI and corrosion protection. These couplers are ideal for airborne applications and inexpensive enough for use in test and development applications.

A full environmental qualification report, including gunfire vibration, and mechanical drawings are available upon request for select products.



North Hills Model # DB50010 Box-Type, 5-Stub Data Bus Coupler

Features:

- Better than 45 dB common mode rejection (CMR)
- All industry standard connectors
- High EMI resistance

Benefits:

- Flight qualified
- Low cost
- In stock

Specifications:

Electrical (All parameters are in accordance with MIL-STD-1553B and Notice 2)	
Parameter	Description
Droop	20% Maximum (250 kHz)
Overshoot and Ringing	± 1.0V Peak (250 kHz square wave with 100 ns max rise and fall)
Common Mode Rejection	-45.0 dB (Min) @ 1 MHz
Fault Protection	59Ω ± 1%, 1 Watt per MIL-R-39007
Turns Ratio	1:1.41
Stub Voltage	1.0V _{pp} to 14.0V _{pp} transformer coupled
Operating Temperature	-55°C to +125°C
Storage Temperature	-55°C to +150°C
Electrical Notes	R1=R2= 59Ω(1 watt per MIL-R-39007), Z ₀ = Nominal Line Impedance of Bus 78Ω, N = 1.41
Higher temperature units available. Specifications subject to change without notice.	

Material (Unless otherwise specified)	
Parameter	Description
Case	0.031 CRS
Base Plate	0.043 CRS
Finish	Hot Tin Dip
Color	MIL-E-15090 Lt. Blue Enamel

Bottom surface is unpainted. All dimensions are in inches, nominal dimensions shown.



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

Ordering Information

Coupler

Model #	# of Stubs	Input Imp. (Ω)	Trompeter Connector (Or Equivalent)		Length (inch)	Weight (g)	Terminator (recomm.)
			Female	Mating			
DB20010	2	*1500	BJ77	PL75	3.125	160	RT500078
NH12864	2	1500	BJ77	PL75	2.25	150	RT500078
DB30010	3	1000	BJ77	PL75	4.000	206	RT500078
DB40010	4	750	BJ77	PL75	4.875	256	RT500078
DB50010	5	600	BJ77	PL75	5.750	300	RT500078
DB20020	2	1500	BJ371	PL375	3.125	160	RT600078
DB30020	3	1000	BJ371	PL375	4.000	206	RT600078
DB40020	4	750	BJ371	PL375	4.875	256	RT600078
DB50020	5	600	BJ371	PL375	5.750	300	RT600078
DB20030	2	1500	BJ157	PL155	3.125	175	RT700078
DB30030	3	1000	BJ157	PL155	4.000	196	RT700078
DB40030	4	750	BJ157	PL155	4.875	276	RT700078
DB50030	5	600	BJ157	PL155	5.750	316	RT700078
DB20040	2	1500	BJ3150	PL3155	3.125	175	RT800078
DB30040	3	1000	BJ3150	PL3155	4.000	196	RT800078
DB40040	4	750	BJ3150	PL3155	4.875	276	RT800078
DB50040	5	600	BJ3150	PL3155	5.750	286	RT800078
DB60010	6	500	BJ77	PL75	8.28	500	RT500078
DB80031	8	375	BJ157	PL155	8.28	590	RT700078
DB80091	8	375	BJ77	PL75	8.28	590	RT500078

*75 kHz to 1.0 MHz (Stub Open Circuited)

Terminations

Part #	Plug Description
RT500078	PL75
RT600078	PL375
RT700078	PL155
RT800078	PL3155

RFI Caps

Part #	Plug Description
RT500000	PL75
RT600000	PL375
RT700000	PL155
RT800000	PL3155

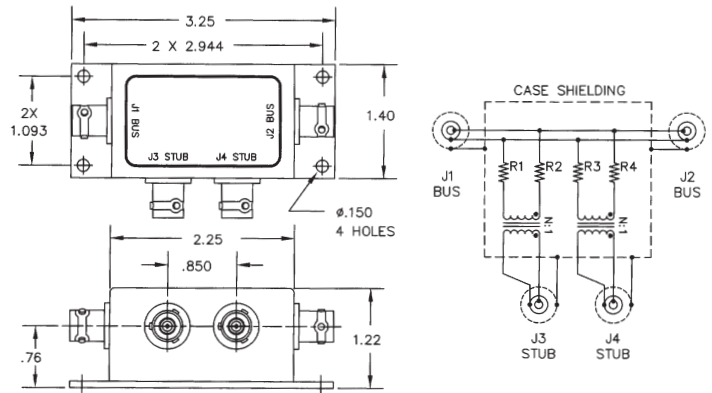


The information in this Brochure is believed to be accurate; however, no responsibility is assumed by Beta Transformer Technology Corporation for its use, and no license or rights are granted by implication or otherwise in connection therewith. Specifications are subject to change without notice.

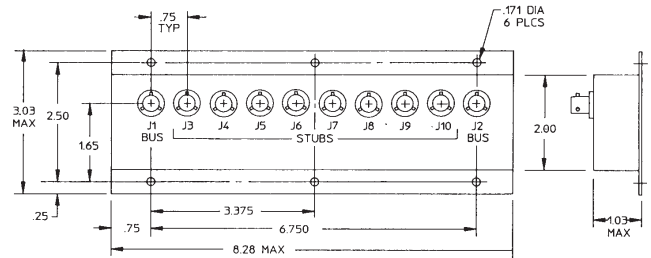
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Technical Drawings

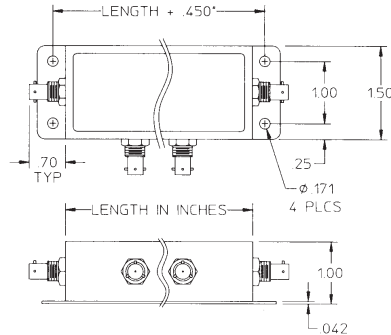
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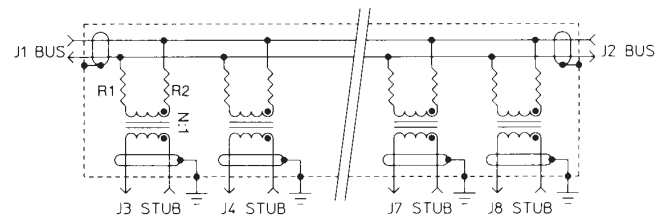
DB80031, DB80091, DB60010



DB20010 TO DB50040



STUB SCHEMATIC



For ordering assistance and technical support,

E-Mail: service@BTTC-Beta.com

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