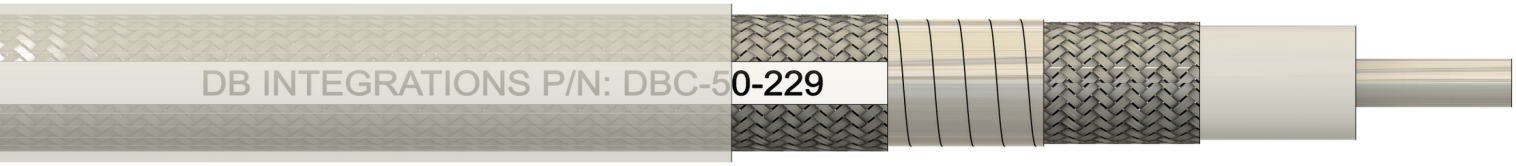
DB Integrations

50 OHM COAX CABLE
ULTRA LOW LOSS PERFORMANCE
DBC-50-229



PHYSICAL PROPERTIES:	
CENTER CONDUCTOR	15 AWG SOLID SILVER-PLATED
DIELECTRIC	LOW DENSITY PTFE
INNER SHIELD	SILVER-PLATED COPPER WOVEN STRIP
INTERLAYER	ALUMINUM FOIL
OUTER CONDUCTOR	36 AWG SILVER-PLATED COPPER ROUND BRAID
JACKET	CLEAR FEP 0.229 +/-0.005 in O.D.
MIN. BEND RADIUS	1.2 in (3.048 cm)
WEIGHT	0.05 lbs/ft (0.072 kg/m)
SKYDROL RESISTANT	YES
OPERATING TEMPERATURE	-55°C TO +200°C

ELECTRICAL PROPERTIES:	
MAX. FREQUENCY	27 GHz
IMPEDANCE	50 OHMS NOMINAL
PROPAGATION VELOCITY	80% NOMINAL
TIME DELAY	1.27 ns/ft (4.17 ns/m)
SHIELDING EFFECTIVENESS	-90 dB NOMINAL
CAPACITANCE	25.5 pF/ft (83.6 pF/m)

STANDARD COMPLIANCE:	
CABLE MIL	MIL-C-17
CABLE FAA	TITLE 14 CFR, PART 25.869 (A)(4) AMENDMENT 25-113 APPENDIX F, PART I (A)(3)
CONNECTOR INTERFACE	MIL-STD-348
CONNECTOR MATERIAL	MIL-PRF-39012

ATTENUATION:	
150 MHz	0.027 dB/ft
1000 MHz	0.071 dB/ft
1600 MHz	0.091 dB/ft
2400 MHz	0.107 dB/ft
5000 MHz	0.161 dB/ft

CERTIFICATIONS:
ISO 9001
AS9100
FAA-PMA
AC 00-56B

CALL OR EMAIL FOR AVAILABILITY

DB INTEGRATIONS
3405 Airport Road
Allentown, PA 18109
(610) 443-0201
www.dbiaero.com
sales@dbiaero.com

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AVAILABLE CONNECTORS	
DBT-229-PTS	(PLUG, TNC, STRAIGHT)
DBT-229-PTR	(PLUG, TNC, 90 DEGREES)
DBT-229-BTS	(BULKHEAD, TNC, STRAIGHT)
DBT-229-JTS	(JACK, TNC, STRAIGHT)
DBT-229-PSS	(PLUG, SMA, STRAIGHT)
DBT-229-PSR	(PLUG, SMA, 90 DEGREES)
DBT-229-PNS	(PLUG, N, STRAIGHT)

CERTIFICATIONS:
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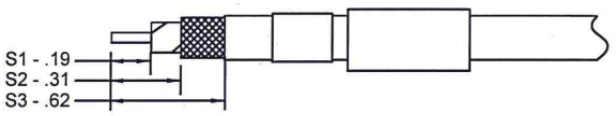
TERMINATION INSTRUCTIONS FOR ALL DBT-229 CONNECTORS

Note: It is optional to use kit, P/N: DBC-TERM-001 to assist with terminations. This tooling may be substituted as required.

Additional required tooling:	***Included in kit, P/N: DBC-TERM-001*** **(contact DBI to rent or purchase)**	
File	Cable cutter	Soldering iron
Wrenches	Flush cutter	Flux
Heat gun	Solder pot	Solder
Razor blade	Coax jacket stripper	Desoldering wick
	Holding fixture	

1. Slide the heat shrink and ferrule over the end of the cable prior to stripping the cable. Ensure that the cable end is cut square.

2. Strip cable to the dimensions shown. If using the coax jacket stripper provided with the DBC-TERM-001 kit, insert the cable into the tear drop shaped cutting slot until it reaches the other side (this is so the cable stays square to the blade during cutting). Rotate until it cuts through the braiding. Use a razor blade to remove the rest of the dielectric. Then flush cut the center conductor so that 0.190 inches is exposed from the dielectric.



Note: *Alternatively, use a razor blade to cut through the braiding. Make this cut at 0.190 inches from the end of the cable.*

Figure 1: Coax Jacket Stripper

3. Using a small file, debur the center conductor so that it flows into the connector receptacle smoothly. It is recommended to put at least a 45 degree chamfer on the end.

4. The contact can be soldered or crimped. Install the contact on the center conductor so that it is flush to the dielectric. When crimping, for connector P/N: DBT-229-PSS use M22520/5-13 or Y206P (0.068 B hex) with crimp tool M22520/5-01 or equivalent. For all other connectors use M22520/5-59 or Y208P die (0.100 B hex) with crimp tool M22520/5-01 or equivalent.

5. Fold all shields back perpendicular to cable. You may need to make a small slit in the aluminum foil before folding the shield back.

6. Slide the connector onto the cable until the contact snaps into the dielectric lock of the connector. Fold all shields forward over the connector.

7. Slide the ferrule over the shield until it is against the connector body. Trim any excess shield. Crimp the ferrule using M22520/5-59 or Y208P die (0.255 A hex) with crimp tool M22520/5-01 or equivalent. After crimping the ferrule, install the adhesive heat shrink.