

DBRF400 Flexible Low Loss 50 Ohm Coaxial Cable that is acceptable substitution for RG-8 & 9913 Air Dielectric coax and uses standard RG-8 & 9913 Connectors, used for Jumper assemblies in Wireless Communications Systems, Antenna Feeder Runs and any application requiring a Low Loss RF Cable

Description: 1/C .108" Gas Injected Foam Polyethylene Insulation, Bonded Aluminum/Polyester/Aluminum Tape, Tinned Copper Braid Shield and Polyethylene Jacket.

A. Construction:

- 1.0 Conductor: .108" Bare Copper Clad Aluminum; OD: .108" Nom. (2.743mm)
- 2.0 Insulation: .0885" Wall Gas Injected Foamed Polyethylene; OD: .285" Nom. (7.24mm)
- 3.0 Shield #1: Aluminum/Polyester/Aluminum-Bonded Tape, 100% Coverage
- 4.0 Shield #2: 34 AWG Tin Copper Braid 90% Coverage
- 5.0 Jacket: .045" Wall Polyethylene; Color: Black
OD: .405" Nom. (10.29mm)
- 6.0 Marking: Surface Printed:
GENERAL CABLE (F) DBRF400 -- 50 OHM COAXIAL CABLE - ROHS--MADE IN USA - MM/YY AAAAAA XXXXXFT

MM/YY = month and year of manufacturing
 AAAAA = MFG identification for Traceability
 XXXXX = sequential footage marking every two feet

B. Electrical Characteristics:

- 1.0 Capacitance: 23.5 pF/ft Nom. (77.1 pF/m)
- 2.0 Impedance: 50.0 Ω Nom.
- 3.0 Velocity of Propagation: 85% Nom.
- 4.0 Conductor DCR: 1.39 Ω/kft Nom. (4.56 Ω/1000m)
- 5.0 Shield DCR: 1.65 Ω/kft Nom. (5.41 Ω/1000m)
- 6.0 Inductance: .059 μ/ft (.194 μ/m)
- 7.0 Peak Power: 16kW

REV	DATE	CHANGE DETAIL		General Cable 20 Forge Park, Franklin, Ma 02038 Phone: 508-541-7100 Fax: 508-541-8122			
	I	03/18/13					Update attn. /GT
	H	09/18/12					Added ROHS to legend-DB
			Title:	DBRF400 .108" -- 50 Ohm Broadband Indoor/Outdoor Coaxial Cable			
G	06/15/12	Revise bend radius / gt					
F	08/26/11	Chg HHT to GCC and edit legend / GT					
E	9/8/05	Update Spec to New Format - RZ					
			Description:				
D	6/21/04	Updated electrical on Spec - RZ					
C	09/06/03	Update to new format /PF	Eng Approval: gt				
B	11/30/01	Edit Title / GT	Mktg Approval:				
			Final Approval:	PAGE 1 of 2			
A	04/24/01	Initial Release - PF					

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- 8.0 Voltage Withstanding: 2500 VDC
- 9.0 Jacket Spark: 8000 VRMS
- 10.0 Shield Effectiveness: >90 dB
- 11.0 Cutoff Frequency: 16.2 GHZ
- 12.0 Attenuation & AVG power: (Nom.)

<u>Frequency (MHz)</u>	<u>Att. dB/100ft</u>	<u>Attn. dB/100m</u>	<u>Avg. Power (KW)</u>
30	0.70	2.30	3.43
50	0.90	2.95	2.67
150	1.50	4.92	1.60
220	1.90	6.23	1.26
450	2.70	8.86	0.89
900	3.90	12.79	0.62
1500	5.20	17.06	0.46
1800	5.90	19.35	0.41
2000	6.30	20.66	0.38
2500	7.20	23.62	0.33
3000	8.10	26.57	0.30
3500	10.20	33.46	0.24
4500	11.80	38.70	0.20
5800	12.50	41.00	0.19
6000	12.71	41.69	0.19

C. **Mechanical Characteristics:**

- 1.0 Cable Weight: 68.3 lbs./kft / (101.8 Kg/km)
- 2.0 Bend Radius (Installation): 1.0 inch / (25.4 mm) min
- 3.0 Bend Radius (Repeated): 4.0 inch / (101.6 mm) min
- 4.0 Tensile Strength: 160 Lbs. / (712.0 N)
- 5.0 Operating Temperature: -60°C to +75°C
- 6.0 Storage Temperature: -70°C to +85°C

D. **Compliance:** RoHS Compliant

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