

D-COAX 1.85mm Female Bulkhead Connectors on UT-023 Semi-Rigid Series Cable

High Frequency, 0.023" semi-rigid (65 GHz)

D-COAX 1.85mm Female Bulkhead Connectors on UT-023 Semi-Rigid Series Cable consists semi-rigid cable assemblies with 1.85 mm female connectors on both ends. Compared to other D-COAX offerings this cable is small diameter and can be used as a probe or connected on small pitch when the cable is cut for this purpose where multiple cables are used.

The UT-023 series cable is a phase stable cable. This cable utilizes silver plated copper conductor, with a low loss FEP dielectric. The shield consists of copper tube: a copper tube that it yields low contact resistance, resulting in low insertion loss and contributes to excellent RF leakage characteristics, specified at > -100 dB to 18 GHz.

This assembly uses impedance-matched 1.85mm connectors to accomplish low return loss up to 65 GHz. These assemblies will make great and cost-effective test cables. UT-023 Series cable pair is available in custom lengths also.

Features and Benefits

Flexibility: Semi-rigid	0.05-inches bend radius
	Bulkhead connectors
	Low weight cable assembly
Durability	Single outer solid shield
RF performance	Center conductor is silver-plated copper covered steel (SPCW)
	Shield is copper tube
	FEP Dielectric
	≤ 1ps skew match available
	Phase Stable
	Low insertion loss
	Good return loss
	High bandwidth

Specification*

Electrical

Characteristic Impedance	50-Ohm +/-2
Max Frequency	65GHz
Phase stability with bending	NA
Amplitude stability with bending	NA
Capacitance (cable)	29 pf/foot
Skew Matched	≤ 1ps available
Attenuation/ Insertion Loss	Less than 3.9dB (3.9 inches), Less than 8dB (12 inches)
Return loss	Better than 14 dB
Shielding effectiveness	> -100 dB to 18 GHz
Power Handling	< 0.4 Watts @ 65GHz (Cable)

Mechanical

Overall Length	Available in xx inch, xx-inch, or custom lengths
Cable outside diameter	0.023 inch
Connector type	female 1.85 mm connector (male connector available)
Bend Radius	0.05 inches (centerline)
Connector Retention	8 lb. (straight pull)
Center Conductor Retention	5 lb. (straight pull)
Weight	16g (3.9-inch assembly), 17g (12-inch assembly)
Temperature Range	-40 to +125 degree Celsius (Coax)
Number of connections	> 2,000

0.023 Semi-Rigid cable Series

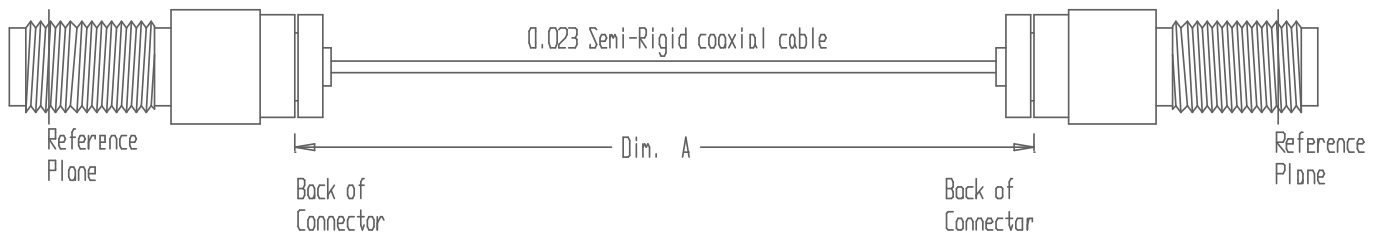
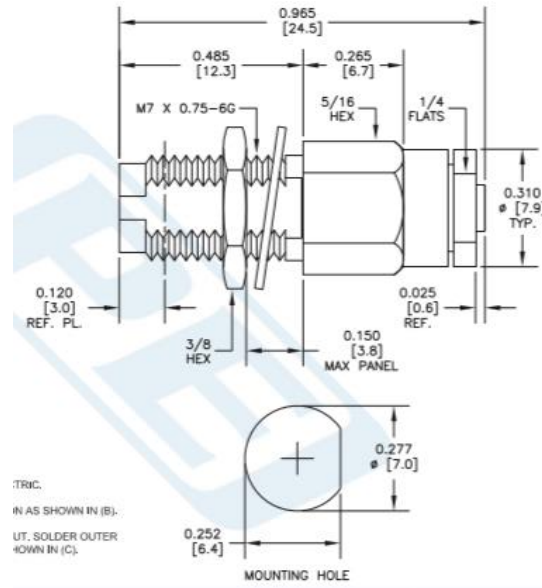
www.d-coax.com



* Data, design and specifications depend on individual process conditions and can vary according to equipment configurations. Not all specifications may be valid simultaneously.

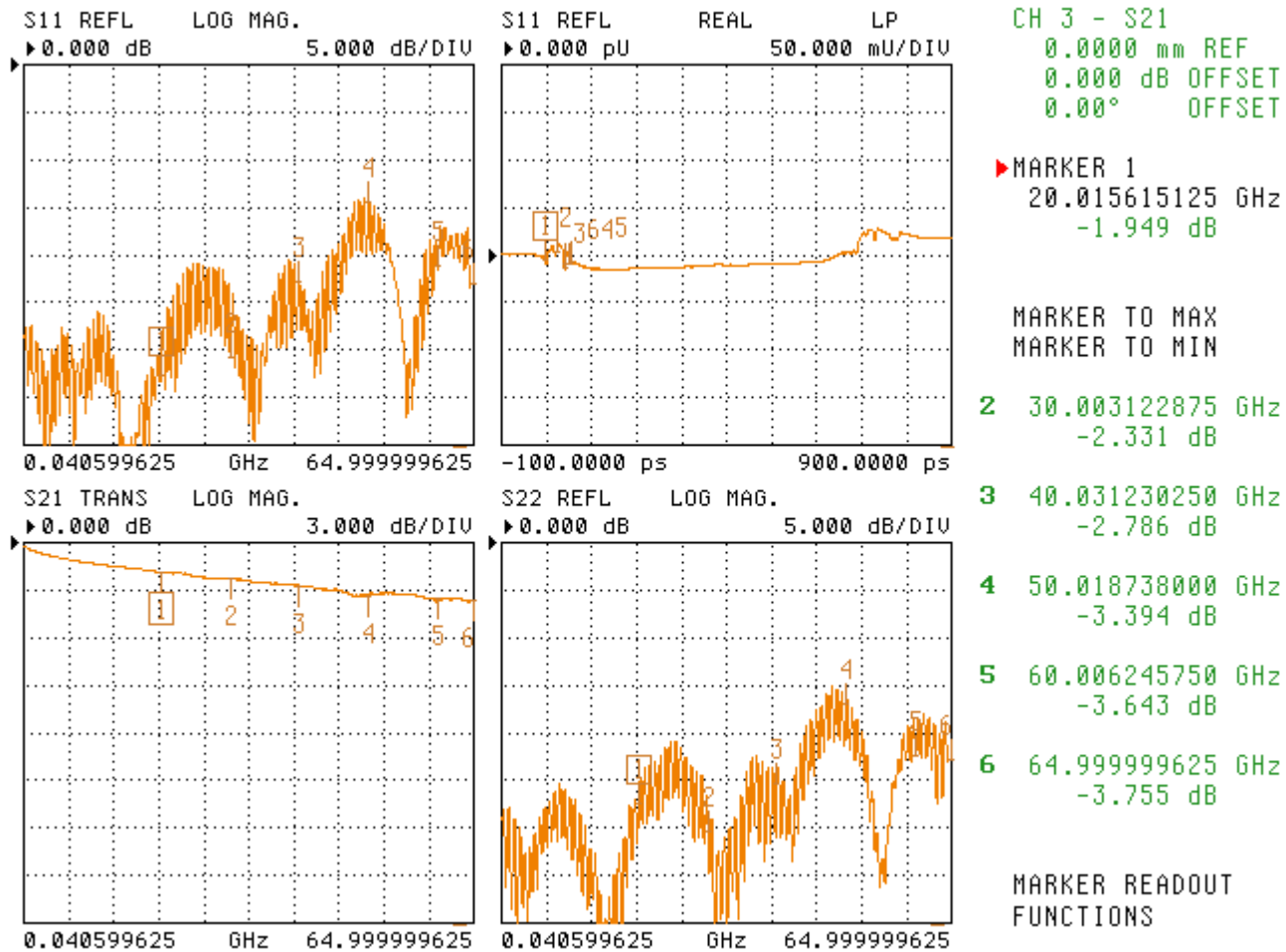
Physical Dimensions

Series UT-023 cable dimensions (all dimensions in inches, A – is variable length of the assembly)



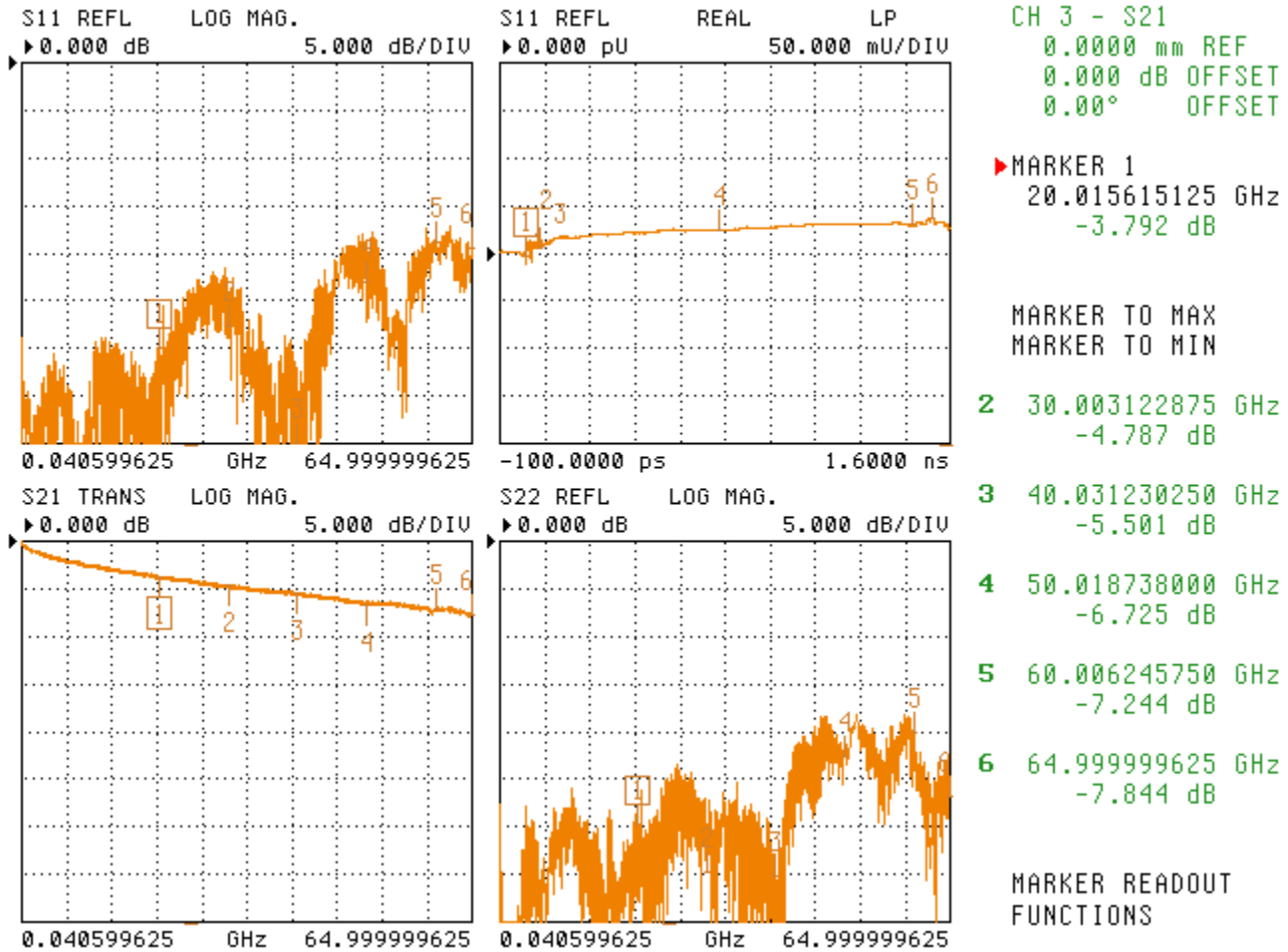
Typical Performance

S-parameters performance of 3.9-inch cable



Typical Performance (continued)

S-parameters performance of 12-inch cable



Applications

The UT Series Cable Pair is ideal for:

- Signal Integrity
- Chanel Modeling
- Jitter Measurements
- Differential Measurements
- VNA measurements
- Probes
- Muti-channel connections on a tight pitch

Ordering Information

Standard Length Cable Pairs:

Part Number	Description	Length
600-00194-00	65 GHz UT-023 Series Cable, 1.85 mm female bulkhead/female bulkhead	12"
600-00195-00	65 GHz UT-023 Series Cable, 1.85 mm male/female bulkhead	12"
600-00194-00-P	65 GHz UT-023 Series Cable Pair, 1.85 mm female bulkhead/female bulkhead	12"
600-00195-00-P	65 GHz UT-023 Series Cable Pair, 1.85 mm male/female bulkhead	12"
600-00196-00	65 GHz UT-023 Series Cable, 1.85 mm male/male	12"
600-00196-00-P	65 GHz UT-023 Series Cable Pair, 1.85 mm male/male	12"

Custom lengths are available.

D-COAX, Inc.
Corporate Headquarters
Phone: (503) 922-2436
Email: info@d-coax.com

0.023 Semi-Rigid cable Series
www.d-coax.com

