

dB MISER™

096 & 110 SERIES

NEW SIZES



ULTRA LOW LOSS CABLE ASSEMBLIES



**Are you a design or test engineer
challenged with a loss budget and
limited real estate?**

Consider **dB Miser™** ultra low loss
cable assemblies **in sizes 096 and 110.**

High performance materials, careful
attention to design detail, and stringent
process control yields:

- *Ultra low insertion loss over the
specified frequency range*
- *Excellent amplitude stability with flexure*
- *Stable performance over operating
temperature range*
- *Increased shielding effectiveness*
- *Greater connector retention*

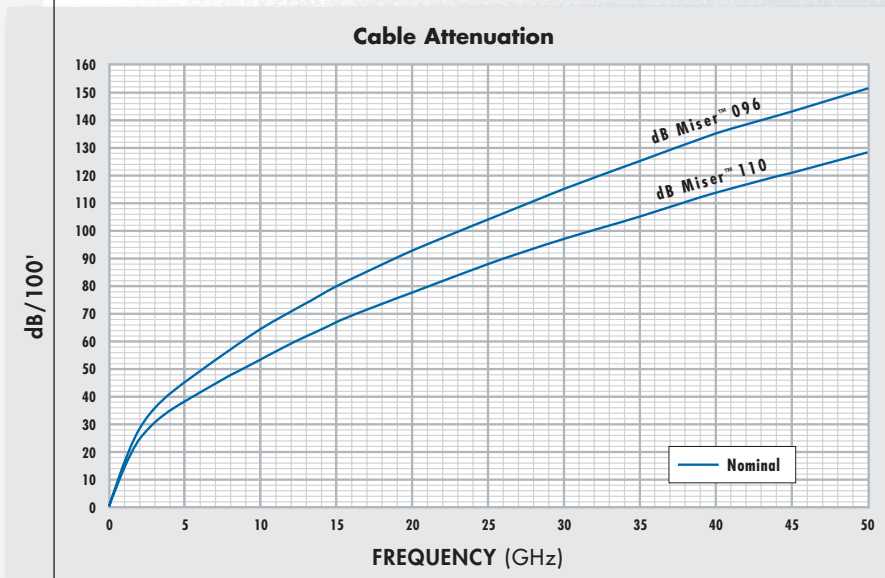
Cable Attenuation

dB Miser™ 096

1.513 dB/ft nom @ 50 GHz

dB Miser™ 110

1.282 dB/ft nom @ 50 GHz



**TELEDYNE
STORM MICROWAVE**
Everywhereyoulook™

*High value microwave and
electronic interconnect solutions*

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dB MISER™

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ULTRA LOW LOSS CABLE ASSEMBLIES

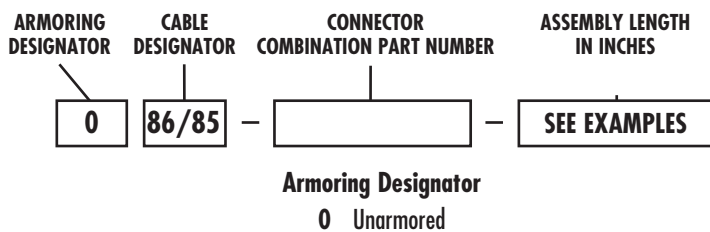
SPECIFICATIONS	dB MISER™		
	096	110	
Cable Designator	86	85	
Diameter (in/mm)	0.096/2.44	0.110/2.79	
Operating Frequency (Max, GHz)	50	50	
Attenuation—Max @ 2 GHz (dB/ft)	0.303	0.253	
Attenuation—Max @ 18 GHz (dB/ft)	0.944	0.794	
Attenuation—Max @ 26.5 GHz (dB/ft)	1.160	0.978	
Attenuation—Max @ 50 GHz (dB/ft)	1.634	1.384	
Power Handling – Avg (watts @ 1 GHz)	177.5	261.5	
Phase Stability vs. Flexure† (typical)	9° @ 26.5 GHz 18° @ 50 GHz	2° @ 26.5 GHz 4° @ 50 GHz	
Phase Shift vs. Temperature ppm (nominal/tolerance)	-55° C	627/100	607/100
	+20° C	-4/100	-27/100
	+120° C	951/100	808/100

SPECIFICATIONS	dB MISER™		
	096	110	
Cable Designator	86	85	
Phase Matching	No	No	
Shielding Effectiveness—Min‡ (dB @ 18 GHz)	-95	-95	
Typical VSWR (2 straight connectors)	1.40 to 50 GHz	1.40 to 50 GHz	
Min Bend Radius (in/mm)	Static	0.5/12.7	0.5/12.7
	Dynamic	1.0/25.4	1.0/25.4
Connector Retention pull (lbs/kg)	15/6.80	25/11.34	
Velocity of Propagation (%)	81.0	81.0	
Weight (grams/ft & /m)	4.83/15.85	6.77/22.21	
Operating Temperature Range (°C)	-55 to +125	-55 to +125	

† ± 360 degree bends around a 20 x cable OD mandrel ‡ Subject to connector choice.

Specifications subject to change without notice.

ORDERING INFORMATION: Part Number Designation



EXAMPLES:

086-0505-048 = Unarmored dB Miser™ 096, SMK (2.92 mm) SP to SMK (2.92 mm) SP (assembly operates to 40 GHz), **48 inches**

085-0606-180 = Unarmored dB Miser™ 110, 2.4 mm SP to 2.4 mm SP (assembly operates to 50 GHz), **180 inches**

CONNECTOR CODES	
SP	Straight Plug
RAP	Right-Angle Plug

dB MISER™ 096 & dB MISER™ 110 CONNECTOR COMBINATION PART NUMBERS*

CONNECTOR OPERATING FREQUENCY	CONNECTOR COMBINATION PART NUMBERS*					
	18 GHz	26.5 GHz	40 GHz	50 GHz		
SMA RAP						
SMA SP						
SMK (2.92 mm†) SP						
SMK RAP						
2.4 mm SP						
18 GHz	SMA RAP	2121	0121	0521	2125	0621
26.5 GHz	SMA SP	0121	0101	0105	0125	0106
40 GHz	SMK (2.92 mm†) SP	0521	0105	0505	0525	0506
	SMK RAP	2125	0125	0525	2525	0625
50 GHz	2.4 mm SP	0621	0106	0506	0625	0606

* Other connector styles available; consult Storm

† IEEE Standard 287



AS9100/ISO 9001 REGISTERED

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