

PHASE MASTER®

096 & 110 SERIES

NEW SIZES



PHASE STABLE CABLE ASSEMBLIES



Are you a design or test engineer looking for cable assemblies that offer an unmatched combination of phase stability, low loss, and value?

Then take a look at our **Phase Master®** cables, now available in **096 and 110 sizes**.

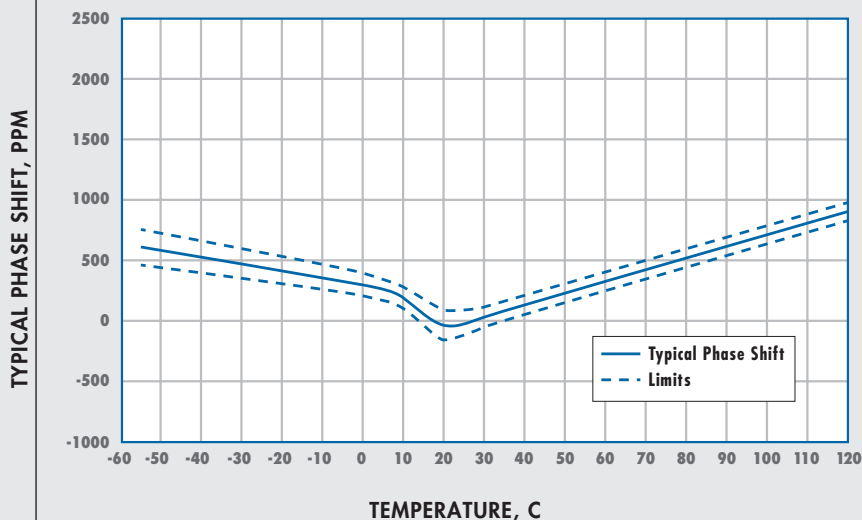
Superior phase stability vs. temperature makes this cable the ideal choice for phase-sensitive applications—particularly those **with wide operating temperature ranges**.

Phase Master's enhanced phase stability—a result of a proprietary combination of high performance, tape wrapped PTFE dielectric and helically wrapped SPC shield—offers:

- Improved system performance
- Less frequent calibration
- More precise measurements

From environmental stress screening to electronically scanned radar systems, count on Phase Master® assemblies to provide **unparalleled value and performance**.

PHASE vs. TEMPERATURE – PHASE MASTER® 110 CABLE



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High value microwave and
electronic interconnect solutions

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PHASEMASTER®

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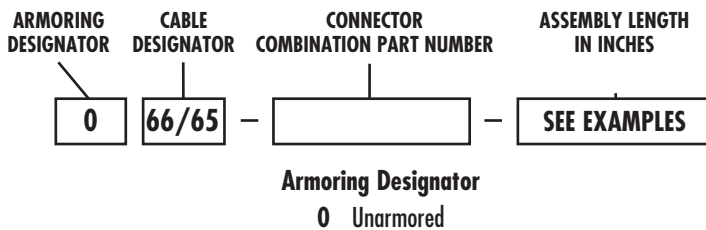
SPECIFICATIONS	PHASE MASTER®		
	096	110	
Cable Designator	66	65	
Diameter (in/mm)	0.096/2.44	0.110/2.79	
Operating Frequency (Max, GHz)	50	50	
Attenuation—Max @ 2 GHz (dB/ft)	0.303	0.253	
Attenuation—Max @ 18 GHz (dB/ft)	0.944	0.794	
Attenuation—Max @ 26.5 GHz (dB/ft)	1.160	0.978	
Attenuation—Max @ 50 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	PHASE MASTER®		
	096	110	
Cable Designator	66	65	
Phase Matching	Yes	Yes	
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:

066-0505-048 = Unarmored Phase Master® 096, SMK (2.92 mm) SP to SMK (2.92 mm) SP (assembly operates to 40 GHz), **48 inches**

065-0606-180 = Unarmored Phase Master® 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

PHASE MASTER® 096 & PHASE MASTER® 110 CONNECTOR COMBINATION PART NUMBERS*

	CONNECTOR OPERATING FREQUENCY					
	18 GHz	26.5 GHz	40 GHz	50 GHz		
	SMA RAP	SMK (2.92 mm) SP	SMK (2.92 mm†) SP	SMK RAP	2.4 mm SP	
18 GHz	SMA RAP	0121	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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