



DELTA
Electronics Mfg. Corp.

Delta RF Test Cables

Color Coded

Low Loss

Phase Stable



2.92 mm



2.4 mm



1.85 mm



978-927-1060 | sales@deltarf.com | deltarf.com

Critical Interface Dimensions and RF Test Data

RF Connector critical interface dimensions meet the requirements of Mil-STD 348, latest revision, IEC 61169-32 (1.85 mm), 61169-40 (2.4 MM), 61169-35 (2.92 MM) as applicable.

Delta's Precision Test Cables are tested 100% for VSWR and Insertion Loss up to the maximum operating frequency for each series. VSWR and Insertion Loss plots are provided with each precision test cable.

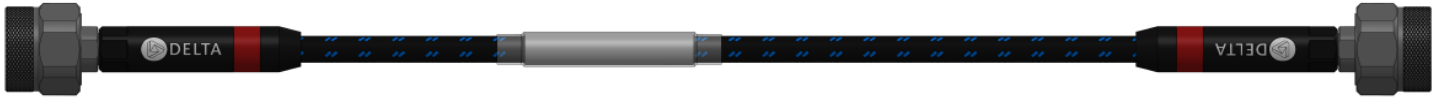
True vertical integration across the manufacturing process

Delta's vertically integrated global manufacturing facilities offer customers across a broad range of industries in-house design and simulation, manufacturing and assembly, and in-process inspection and testing to deliver custom RF solutions. With our wide range of capabilities and a team of experienced engineers and technicians, we deliver the highest level of quality by the most efficient, cost-effective, and flexible means available.

Table of Contents

Low Loss, Phase Stable Test Cables - 18 GHz	Part Number	Page #
N Plug to N Plug, 18 GHz, Precision Test Cables	PT18-NMNM-XXX	3
Low Loss, Phase Stable Test Cables - 26.5 GHz	Part Number	Page #
SMA Plug to SMA Plug, 26.5 GHz, Precision Test Cables	PT26.5-SMSM-XXX	4
Low Loss, Phase Stable Test Cables - 40.0 GHz	Part Number	Page #
2.92 MM to 2.92 MM, 40 GHz, Precision Test Cables	PT40-KMKM-XXX	5
Low Loss, Phase Stable Test Cables - 50.0 GHz	Part Number	Page #
2.4 MM to 2.4 MM, 50 GHz, Precision Test Cables	PT50-24M24M-XXX	6
Low Loss, Phase Stable Test Cables - 67.0 GHz	Part Number	Page #
1.85 MM to 1.85 MM, 67 GHz, Precision Test Cables	PT67-185M185M-XXX	7

N Plug to N Plug – 18 GHz



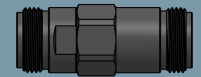
Electrical – Cable Assembly Specifications			N Connector Specifications		
Frequency Range	DC to 18 GHz		Body Material	Corrosion Resistant Steel	
Impedance	50 Ohms		Body Plating	Passivated	
VSWR @ 18 GHz	1.25:1 Max.		Contact Material	Brass	
Insertion Loss	See Table Below		Contact Plating	Au Plate	
Amplitude Stability	+/- 0.05 dB		Insulator Material	PTFE	
Phase Stability	+/- 5°		Coupling Nut Material	Corrosion Resistant Steel	
DWV@Sea Level	500 Vrms		Coupling Nut Plating	Passivated	
Insulation Resistance	5000 MΩ		Backshell Material	Aluminum	
VoP	74%		Backshell Plating	Anodized	
Shielding Effectiveness	< -90 dB		Gasket Material	Silicone Rubber	
			Coupling Nut Torque	12-15 In. Lbs.	
Mechanical – Cable Assembly Specifications			DXB 360 RF Cable Specifications		
Static Bend Radius	1.29" (33 mm)		Center Conductor	Silver Plated Copper	
Dynamic Bend radius	2.56" (65 mm)		Dielectric	LD PTFE	
Weight	34 G / Meter		Shield	Silver Plated Copper Ribbon	
Crush Resistance	1500 N / mm 2		Interlayer	PTFE	
Durability	500 Cycles Minimum		Outer Conductor	Silver Plated Copper	
Environmental - Cable Assembly Specifications			Outer Jacket	FEP (Blue)	
Temperature Range	-55 to +125 C		Armor Jacket	Abrasion Resistant PTFE Braided Jacket	
Insertion Loss Performance			Insertion Loss Performance		
Delta Part Number	Length	@18.0 GHz	Delta Part Number	Length	@18.0 GHz
PT18-NMNM-036	36.0"	-2.33 dB	PT18-NMNM-079	79.0"	-4.42 dB
PT18-NMNM-048	48.0"	-2.91 dB	PT18-NMNM-098	98.0"	-5.35 dB
PT18-NMNM-060	60.0"	-3.50 dB	PT18-NMNM-118	118.0"	-6.32 dB
PT18-NMNM-072	72.0"	-4.08 dB	PT18-NMNM-120	120.0"	-6.42 dB

Adapters

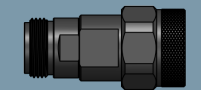
Within Series N Adapters



1127000K001-900

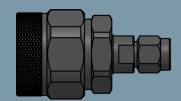


1128000K001-701

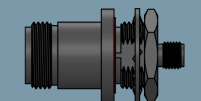


1134000K001-900

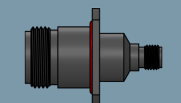
Between Series N to SMA Adapters



2227000K001-810



2226000K721-900



2225000K301-700

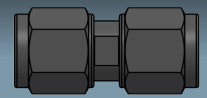
SMA Plug to SMA Plug – 26.5 GHz



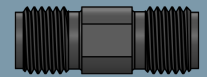
Electrical – Cable Assembly Specifications			SMA Connector Specifications		
Frequency Range	26.5 GHz		Body Material	Corrosion Resistant Steel	
Impedance	50 Ohms		Body Plating	Passivated	
VSWR @ 26.5 GHz	1.30:1 Max.		Contact Material	BeCu	
Insertion Loss	See Table Below		Contact Plating	Au Plate	
Amplitude Stability	+/- 0.05 dB		Insulator Material	PEI (Polyetherimide)	
Phase Stability	+/- 5°		Coupling Nut Material	Corrosion Resistant Steel	
DWV@Sea Level	500 Vrms		Coupling Nut Plating	Passivated	
Insulation Resistance	5000 MΩ		Backshell Material	Aluminum	
VoP	74%		Backshell Plating	Anodized	
Shielding Effectiveness	< -90 dB		Gasket Material	Silicone Rubber	
			Coupling Nut Torque	7-10 In. Lbs.	
Mechanical – Cable Assembly Specifications			DXB 360 RF Cable Specifications		
Static Bend Radius	1.29" (33 mm)		Center Conductor	Silver Plated Copper	
Dynamic Bend radius	2.56" (65 mm)		Dielectric	LD PTFE	
Weight	34 G / Meter		Shield	Silver Plated Copper Ribbon	
Crush Resistance	1500 N / mm 2		Interlayer	PTFE	
Durability	500 Cycles Minimum		Outer Conductor	Silver Plated Copper	
Environmental - Cable Assembly Specifications			Outer Jacket	FEP (Blue)	
Temperature Range	-55 to +125 C		Armor Jacket	Abrasion Resistant PTFE Braided Jacket	
Insertion Loss Performance			Insertion Loss Performance		
Delta Part Number	Length	@26.5 GHz	Delta Part Number	Length	@26.5 GHz
PT26.5-SMSM-036	36.0"	-2.81 dB	PT26.5-SMSM-079	79.0"	-5.38 dB
PT26.5-SMSM-048	48.0"	-3.54 dB	PT26.5-SMSM-098	98.0"	-6.51 dB
PT26.5-SMSM-060	60.0"	-4.26 dB	PT26.5-SMSM-118	118.0"	-7.71 dB
PT26.5-SMSM-072	72.0"	-4.96 dB	PT26.5-SMSM-120	120.0"	-7.83 dB

Adapters

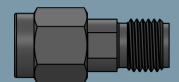
Within Series SMA Adapters



1327000K001-901

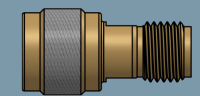


1328000K001-902



1334000K001-901

Within Series SMA Adapters and Connector Savers



1334000G000-006



1326000K671-900



1334000K001-701

2.92 MM Plug to 2.92 MM Plug – 40 GHz



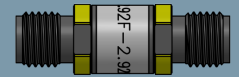
Electrical – Cable Assembly Specifications			2.92 MM Connector Specifications		
Frequency Range	DC to 18 GHz		Body Material	Corrosion Resistant Steel	
Impedance	50 Ohms		Body Plating	Passivated	
VSWR @ 26.5 GHz	1.20:1 Max.		Contact Material	BeCu	
VSWR @ 40 GHz	1.30:1 Max.		Contact Plating	Au Plate	
Insertion Loss	See Table Below		Insulator Material	PEI (Polyetherimide)	
Amplitude Stability	+/- 0.05 dB		Coupling Nut Material	Corrosion Resistant Steel	
Phase Stability	+/- 5°		Coupling Nut Plating	Passivated	
DWV@Sea Level	500 Vrms		Backshell Material	Aluminum	
Insulation Resistance	5000 MΩ		Backshell Plating	Anodized	
VoP	74%		Gasket Material	Silicone Rubber	
Shielding Effectiveness	< -90 dB		Coupling Nut Torque	7-10 In. Lbs.	
Mechanical – Cable Assembly Specifications			DXB 360 RF Cable Specifications		
Static Bend Radius	1.29" (33 mm)		Center Conductor	Silver Plated Copper	
Dynamic Bend radius	2.56" (65 mm)		Dielectric	LD PTFE	
Weight	34 G / Meter		Shield	Silver Plated Copper Ribbon	
Crush Resistance	1500 N / mm 2		Interlayer	PTFE	
Durability	500 Cycles Minimum		Outer Conductor	Silver Plated Copper	
Environmental - Cable Assembly Specifications			Outer Jacket	FEP (Blue)	
Temperature Range	-55 to +125 C		Armor Jacket	Abrasion Resistant PTFE Braided Jacket	
Insertion Loss Performance			Insertion Loss Performance		
Delta Part Number	Length	@40.0 GHz	Delta Part Number	Length	@40.0 GHz
PT40-KMKM-036	36.0"	-3.30 dB	PT40-KMKM-079	79.0"	-6.49 dB
PT40-KMKM-048	48.0"	-4.19 dB	PT40-KMKM-098	98.0"	-7.89 dB
PT40-KMKM-060	60.0"	-5.08 dB	PT40-KMKM-118	118.0"	-9.38 dB
PT40-KMKM-072	72.0"	-5.97 dB	PT40-KMKM-120	120.0"	-9.52 dB

Adapters

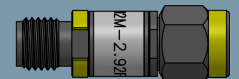
Within 2.92 MM
Color Coded
Adapters



7927000K001-805-C



7928000K001-803-C



7934000K001-802-C

Between
Series 2.92 MM
to 1.85 MM Color
Coded Adapters



2227000K001-815-C



2228000K001-820-C



2234000K001-834-C



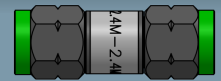
2.4 MM Plug to 2.4 MM Plug – 50 GHz



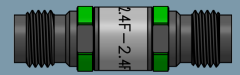
Electrical – Cable Assembly Specifications			2.4 MM Connector Specifications		
Frequency Range	DC to 50 GHz		Body Material	Corrosion Resistant Steel	
Impedance	50 Ohms		Body Plating	Passivated	
VSWR @ 50 GHz	1.35:1 Max.		Contact Material	BeCu	
Insertion Loss	See Table Below		Contact Plating	Au Plate	
Amplitude Stability	+/- 0.05 dB		Insulator Material	PEI (Polyetherimide)	
Phase Stability	+/- 5°		Coupling Nut Material	Corrosion Resistant Steel	
DWV@Sea Level	500 Vrms		Coupling Nut Plating	Passivated	
Insulation Resistance	5000 MΩ		Backshell Material	Aluminum	
VoP	74%		Backshell Plating	Anodized	
Shielding Effectiveness	< -90 dB		Gasket Material	Silicone Rubber	
			Coupling Nut Torque	7-10 In. Lbs.	
Mechanical – Cable Assembly Specifications			DXB 360 RF Cable Specifications		
Static Bend Radius	1.29" (33 mm)		Center Conductor	Silver Plated Copper	
Dynamic Bend radius	2.56" (65 mm)		Dielectric	LD PTFE	
Weight	34 G / Meter		Shield	Silver Plated Copper Ribbon	
Crush Resistance	1500 N / mm 2		Interlayer	PTFE	
Durability	500 Cycles Minimum		Outer Conductor	Silver Plated Copper	
Environmental - Cable Assembly Specifications			Outer Jacket	FEP (Blue)	
Temperature Range	-55 to +125 C		Armor Jacket	Abrasion Resistant PTFE Braided Jacket	
Insertion Loss Performance			Insertion Loss Performance		
Delta Part Number	Length	@50.0 GHz	Delta Part Number	Length	@50.0 GHz
PT50-24M24M-036	36.0"	-3.86 dB	PT50-24M24M-079	79.0"	-7.45 dB
PT50-24M24M-048	48.0"	-4.86 dB	PT50-24M24M-098	98.0"	-9.03 dB
PT50-24M24M-060	60.0"	-5.86 dB	PT50-24M24M-118	118.0"	-10.70 dB
PT50-24M24M-072	72.0"	-6.87 dB	PT50-24M24M-120	120.0"	-10.87 dB

Adapters

Within Series
2.4 MM Color Coded
Adapters



8027000K001-803-C



8028000K001-803-C

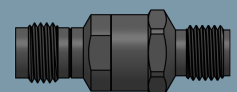


8034000K001-803-C

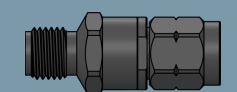
Between
Series 2.92 MM
to 1.85 MM Color
Coded Adapters



2227000K001-804



2228000K001-803



2234000K001-808



1.85 MM Plug to 1.85 MM Plug – 67 GHz



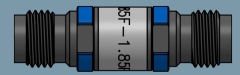
Electrical – Cable Assembly Specifications			1.85 MM Connector Specifications		
Frequency Range	DC to 18 GHz		Body Material	Corrosion Resistant Steel	
Impedance	50 Ohms		Body Plating	Passivated	
VSWR @ 67 GHz	1.35:1 Max.		Contact Material	BeCu	
Insertion Loss	See Table Below		Contact Plating	Au Plate	
Amplitude Stability	+/- 0.05 dB		Insulator Material	PEI (Polyetherimide)	
Phase Stability	+/- 5°		Coupling Nut Material	Corrosion Resistant Steel	
DWV@Sea Level	500 Vrms		Coupling Nut Plating	Passivated	
Insulation Resistance	5000 MΩ		Backshell Material	Aluminum	
VoP	74%		Backshell Plating	Anodized	
Shielding Effectiveness	< -90 dB		Gasket Material	Silicone Rubber	
			Coupling Nut Torque	7-10 In. Lbs.	
Mechanical – Cable Assembly Specifications			DXB 360 RF Cable Specifications		
Static Bend Radius	.55" (13 mm)		Center Conductor	Silver Plated Copper	
Dynamic Bend radius	.98" (25 mm)		Dielectric	LD PTFE	
Weight	16 G / Meter		Shield	Silver Plated Copper Ribbon	
Crush Resistance	1500 N / mm 2		Interlayer	N/A	
Durability	500 Cycles Minimum		Outer Conductor	Silver Plated Copper	
Environmental - Cable Assembly Specifications			Outer Jacket	FEP (Blue)	
Temperature Range	-55 to +125 C		Armor Jacket	Abrasion Resistant PTFE Braided Jacket	
Insertion Loss Performance			Insertion Loss Performance		
Delta Part Number	Length	@67.0 GHz	Delta Part Number	Length	@67.0 GHz
PT67-185M185M-036	36.0"	-6.87 dB	PT67-185M185M-079	79.0"	-13.92 dB
PT67-185M185M-048	48.0"	-7.53 dB	PT67-185M185M-098	98.0"	-17.03 dB
PT67-185M185M-060	60.0"	-10.80 dB	PT67-185M185M-118	118.0"	-20.31 dB
PT67-185M185M-072	72.0"	-12.77 dB	PT67-185M185M-120	120.0"	-20.64 dB

Adapters

**Within Series
1.85 MM Color
Coded Adapters**



8127000K001-803-C



8128000K001-803-C

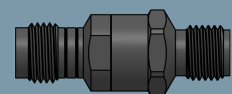


8134000K001-802-C

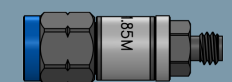
**Between Series
1.85 MM to 1.00 MM
and 1.85 MM to 2.92
MM Adapters**



2234000K001-835-C



2228000K001-804



2234000K001-836-C



DELTA
Electronics Mfg. Corp.



Delta RF Test Cables

Color Coded
Low Loss
Phase Stable



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