Vinstronics

RF & MICROWAVE ADAPTER SERIES

Precision RF & Microwave Adapters

Selection Guide | Selected Models to 110 GHz

Precision threaded interfaces and compact coaxial transitions for RF, microwave and millimeter-wave test interconnects.



RF Adapter Selection Overview

Five precision threaded interface platforms with selected miniature coaxial transitions.

PRECISION THREADED INTERFACES

1.0 mm	1.85 mm	2.4 mm	2.92 mm	3.5 mm
UP TO 110 GHz	UP TO 67 GHz	UP TO 50 GHz	UP TO 40 GHz	UP TO 26.5 GHz

Operating frequency and VSWR are model-specific. Interface size alone does not establish the electrical rating of a transition.

INTERFACE COMBINATION INDEX

1.0 mm / 1.0 mm	P03	2.4 mm / 2.4 mm	P06
1.0 mm / 1.85 mm	P03	2.4 mm / 2.92 mm	P06
1.85 mm / 1.85 mm	P04	2.4 mm / 3.5 mm	P06
1.85 mm / 2.4 mm	P04	2.4 mm / SMP	P07
1.85 mm / 2.92 mm	P04	2.4 mm / SSMP	P07
1.85 mm / 3.5 mm	P05	2.92 mm / 2.92 mm	P08
1.85 mm / SSMP	P05	2.92 mm / 3.5 mm	P08
1.85 mm / MMPX	P05	2.92 mm / SMP	P08
1.85 mm / SSMA	P05	3.5 mm / 3.5 mm	P09

SELECTION CHECKPOINTS

Mating interfaces	Operating band	Electrical match	Mechanical fit
Connector family and gender at each end	Full frequency span required by the system	Model-rated VSWR or return loss	Envelope, mounting and access clearance

1.0 mm Precision Adapters

In-series configurations and selected transitions to 1.85 mm.

1.0 mm Platform

SELECTED MODELS UP TO 110 GHz

Precision threaded adapter interfaces for millimeter-wave instruments, cables and RF test fixtures.



AVAILABLE MODEL CONFIGURATIONS

MODEL NUMBER	END 1 – END 2
1.0 mm / 1.0 mm	DC–110 GHz | 50 Ω | VSWR ≤ 1.40
VST-A-10F10F-02	F–F
VST-A-10M10F-02	M–F
VST-A-10M10M-02	M–M
1.0 mm / 1.85 mm	DC–67 GHz | 50 Ω | VSWR ≤ 1.30
VST-A-110F185F-02	F–F
VST-A-10F185M-02	F–M
VST-A-110M185F-02	M–F
VST-A-110M185M-02	M–M

GENDER NOTATION F = female; M = male. End genders follow the listed interface order.

1.85 mm Precision Adapters

In-series models and precision threaded interface transitions.

1.85 mm Platform

SELECTED MODELS UP TO 67 GHz

50 Ω precision coaxial interfaces for microwave test-port and instrument connections.



STANDARD THREADED CONFIGURATIONS

MODEL NUMBER	END 1 – END 2
1.85 mm / 1.85 mm	DC–67 GHz | 50 Ω | VSWR ≤ 1.25
VST-A-185F185F-01	F–F
VST-A-185M185F-01	M–F
VST-A-185M185M-01	M–M
1.85 mm / 2.4 mm	DC–50 GHz | 50 Ω | VSWR ≤ 1.15
VST-A-185F24F-01	F–F
VST-A-185F24M-01	F–M
VST-A-185M24F-01	M–F
VST-A-185M24M-01	M–M
1.85 mm / 2.92 mm	DC–40 GHz | 50 Ω | VSWR ≤ 1.12
VST-A-292F185F-01	F–F
VST-A-292F185M-01	M–F
VST-A-292M185F-01	F–M
VST-A-292M185M-01	M–M

Related 1.0 mm / 1.85 mm configurations: see P03.

1.85 mm Adapters

Additional threaded and compact coaxial interface transitions.

MODEL CONFIGURATIONS / THREADED & MINIATURE COAXIAL

MODEL NUMBER	END 1 – END 2
1.85 mm / 3.5 mm	DC–26.5 GHz | 50 Ω | VSWR ≤ 1.10
VST-A-35F185F01	F–F
VST-A-35F185M01	M–F
VST-A-35M185F01	F–M
VST-A-35M185M01	M–M
1.85 mm / SSMP	DC–67 GHz | 50 Ω | VSWR ≤ 1.30
VST-A-185FSSMPF-01	F–F
VST-A-185FSSMPM-01	F–M
VST-A-185MSSMPF-01	M–F
VST-A-185MSSMPM-01	M–M
1.85 mm / MMPX	DC–67 GHz | 50 Ω | VSWR ≤ 1.30
VST-A-185MMMPXF-01	M–F
1.85 mm / SSMA	DC–40 GHz | 50 Ω | VSWR ≤ 1.12
VST-A-185MSSMAF-01	M–F

SELECTION NOTE

Confirm the exact frequency, VSWR and miniature-coax mating variant for the required part.

2.4 mm Precision Adapters

In-series models and between-series threaded transitions.

2.4 mm Platform

SELECTED MODELS UP TO 50 GHz

Precision coaxial interface conversions for measurement equipment and RF test interconnects.



STANDARD THREADED CONFIGURATIONS

MODEL NUMBER	END 1 – END 2
2.4 mm / 2.4 mm	DC–50 GHz | 50 Ω | VSWR ≤ 1.15
VST-A-24F24F-01	F–F
VST-A-24M24F-01	M–F
VST-A-24M24M-01	M–M
2.4 mm / 2.92 mm	DC–40 GHz | 50 Ω | VSWR ≤ 1.20
VST-A-292F24F-01	F–F
VST-A-292F24M-01	M–F
VST-A-292M24F-01	F–M
VST-A-292M24M-01	M–M
2.4 mm / 3.5 mm	DC–26.5 GHz | 50 Ω | VSWR ≤ 1.10
VST-A-35F24M01	M–F
VST-A-35M24F-01	F–M
VST-A-35M24M-01	M–M

Related 1.85 mm / 2.4 mm configurations: see P04.

2.4 mm Compact Interface Transitions

Selected SMP and SSMP configurations for compact RF and test-fixture connections.

Miniature coaxial options

Different mating types require careful review of contact geometry and interface retention.



AVAILABLE MODEL CONFIGURATIONS

MODEL NUMBER	END 1 – END 2
2.4 mm / SMP	DC–40 GHz | 50 Ω | VSWR ≤ 1.25
VST-A-24FSMPF-01	F–F
VST-A-24FSMPM-01	F–M
VST-A-24MSMPF-01	M–F
VST-A-24MSMPM-01	M–M
2.4 mm / SSMP	DC–40 GHz | 50 Ω | VSWR ≤ 1.20
VST-A-24FSSMPF-01	F–F
VST-A-24FSSMPM-01	F–M
VST-A-24MSSMPF-01	M–F
VST-A-24MSSMPM-01	M–M

SELECTION NOTE

Specify the mating interface variant and operating band when requesting drawings or data.

2.92 mm Precision Adapters

40 GHz in-series adapters and selected transitions to 3.5 mm and SMP.

2.92 mm Platform

SELECTED MODELS UP TO 40 GHz

Precision interfaces for VNA ports, measurement cables and test fixtures.



AVAILABLE MODEL CONFIGURATIONS

MODEL NUMBER	END 1 – END 2
2.92 mm / 2.92 mm	DC–40 GHz | 50 Ω | VSWR ≤ 1.12
VST-A-292F292F-01	F–F
VST-A-292M292F-01	M–F
VST-A-292M292M-01	M–M
2.92 mm / 3.5 mm	DC–26.5 GHz | 50 Ω | VSWR ≤ 1.12
VST-A-35F292F-01	F–F
VST-A-35F292M-01	M–F
VST-A-35M292F-01	F–M
VST-A-35M292M-01	M–M
2.92 mm / SMP	DC–40 GHz | 50 Ω | VSWR ≤ 1.25
VST-A-292FSMPF-01	F–F
VST-A-292FSMPM-01	F–M
VST-A-292MSMPF-01	M–F
VST-A-292MSMPM-01	M–M

Related transitions: 1.85 mm / 2.92 mm on P04; 2.4 mm / 2.92 mm on P06.

3.5 mm Precision Adapters

In-series models and cross-references to selected threaded transitions.

3.5 mm Platform

SELECTED MODELS UP TO 26.5 GHz

Precision microwave RF interfaces for instrument and bench-test interconnections.



IN-SERIES CONFIGURATIONS

MODEL NUMBER	END 1 – END 2
3.5 mm / 3.5 mm	DC–26.5 GHz | 50 Ω | VSWR ≤ 1.10
VST-A-35F35F-01	F–F
VST-A-35M35F-01	M–F
VST-A-35M35M-01	M–M

RELATED THREADED TRANSITIONS / SEE DETAILED MODEL LISTS

3.5 mm / 2.92 mm	P08
3.5 mm / 2.4 mm	P06
3.5 mm / 1.85 mm	P05

See the referenced pages for model numbers, end genders and RF ratings.

Ordering & Engineering Support

Send a model number or the RF and mechanical interface requirements for engineering review.

INFORMATION FOR MODEL SELECTION & RFQ

Mating interfaces

Connector family and male/female configuration at both ends.

Operating frequency

Full required operating band and any model-specific limits.

RF performance

Required VSWR or return loss; power handling if applicable.

Mechanical constraints

Overall length, hex profile, bulkhead/flange fit, mounting clearance or drawing.

SPECIFICATION CHECK

Exact interface pair	Specify the desired thread and miniature-coax mating form.
Model-level rating	Frequency, VSWR and mechanical configuration depend on the exact model.
Commercial details	Quantity, delivery requirements and any material restrictions.

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