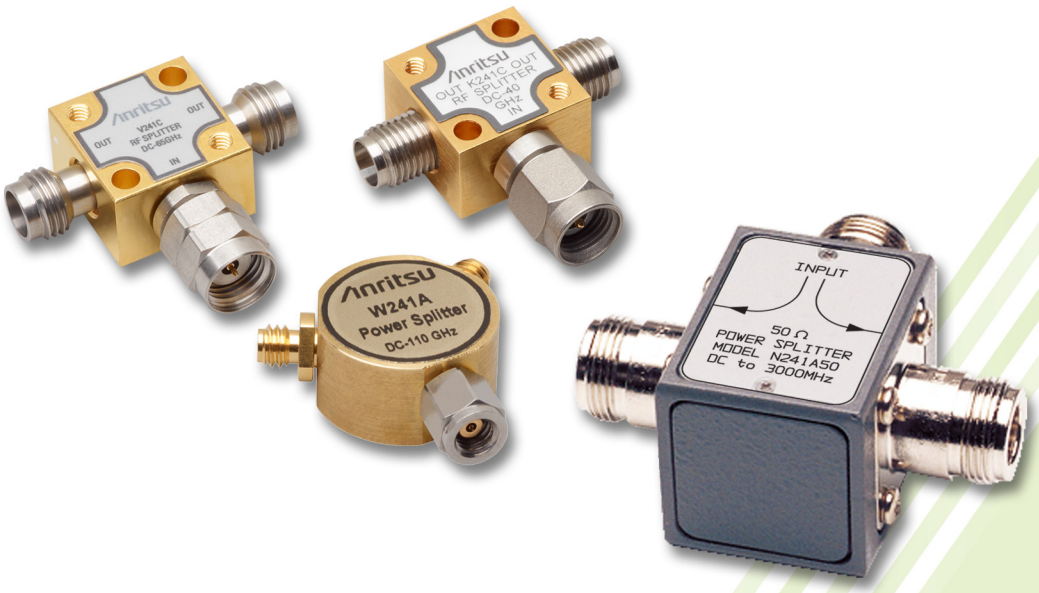
Anritsu Advancing beyond

Precision Power Splitters

W241A
DC to 110 GHz

V241C
DC to 65 GHz

K241 Series
DC to 40 GHz/DC to 26.5 GHz



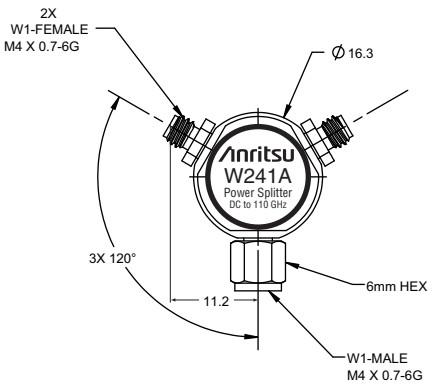
Introduction

Anritsu produces precision power splitters that cover frequencies up to 110 GHz and 1 watt input power. All Anritsu microwave power splitters are symmetrical, two-resistor designs that can be used in applications where signals from DC to 110 GHz must be accurately divided for ratio measurements. They provide excellent flatness and effective output SWR.

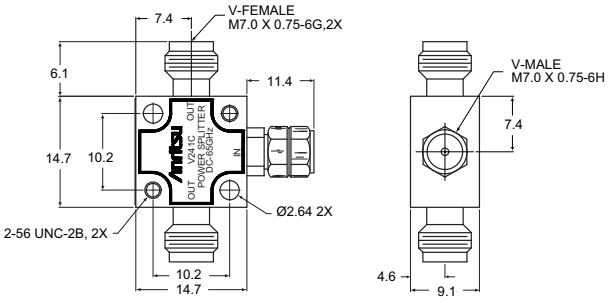
Features

- DC to 110 GHz frequency range
- W1 Connectors™ are compatible with 1 mm connectors
- V Connectors™ are compatible with 2.4 mm connectors
- K Connectors™ are compatible with 3.5 mm and SMA connectors
- Excellent flatness and effective output SWR
- All power splitters are available in 50 Ω characteristic impedance
- Design is robust and well suited for high frequency system and instrumentation applications
- Anritsu offers metrology grade adapters and calibration devices for better repeatability and performance

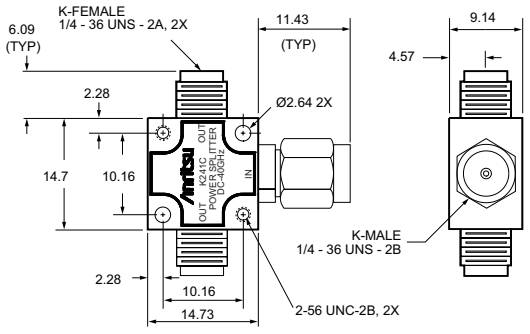
Dimensions



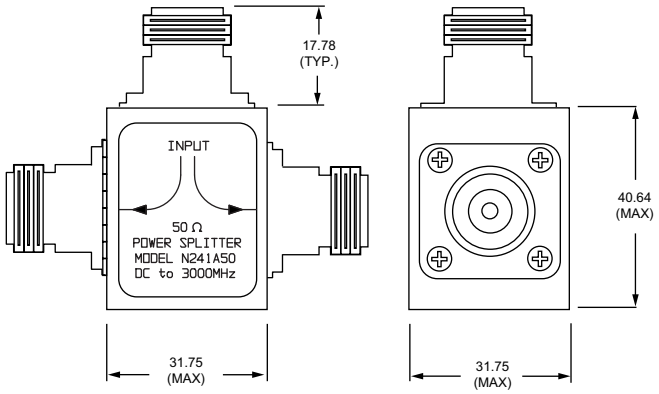
W241A



V241C



K241x



N241A50

All dimensions in mm

Typical specifications are not tested and are not warranted. They are generally representative of characteristic performance.
Warranty: 1 year; Calibration period: 6 months

Available Models

Model	Frequency Range	Connectors	Impedance	Input Power
W241A	DC to 110 GHz	W1(m) to W1(f)	50 Ω	0.2 W
V241C	DC to 65 GHz	V(m) to V(f)	50 Ω	1.0 W
K241C	DC to 40 GHz	K(m) to K(f)	50 Ω	1.0 W
K241B	DC to 26.5 GHz	K(m) to K(f)	50 Ω	1.0 W

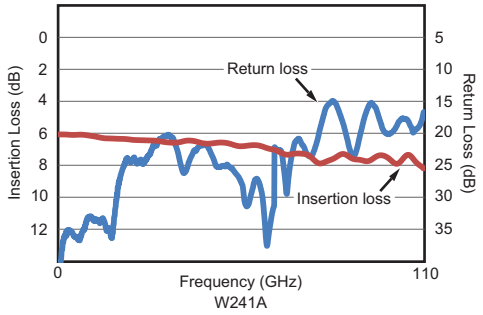
Specifications

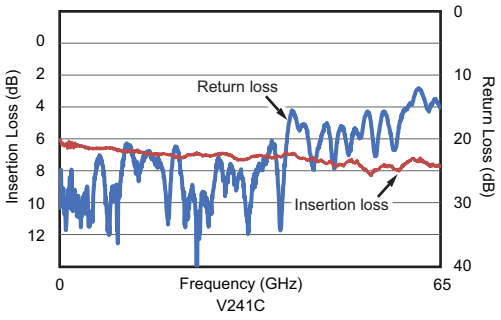
General

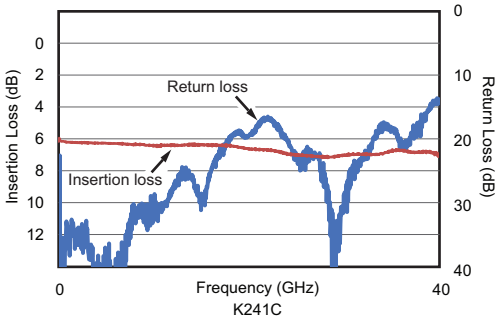
Insertion Loss Temperature Coefficient	0.001 dB/dB/°C max
Temperature Range	Operating: 0 °C to +70 °C; Non-operating: –55 °C to +125 °C
Weight	W241A: 16 g V241C: 43 g K241C: 43 g K241B: 43 g

Insertion/Return Loss, Match, and Transmission Tracking

Model	Frequency Range	Insertion Loss (max)	Input Return Loss (min)	Effective Output Match (min)	Transmission Tracking Amplitude (max)
W241A	DC to 2.5 GHz	7.00 dB	20.00 dB	18.00 dB	0.25 dB
	> 2.5 GHz to 20 GHz	7.00 dB	20.00 dB	18.00 dB	0.40 dB
	> 20 GHz to 50 GHz	7.50 dB	15.00 dB	14.00 dB	0.40 dB
	> 50 GHz to 67 GHz	8.25 dB	15.00 dB	14.00 dB	0.40 dB
	> 67 GHz to 85 GHz	9.00 dB	10.00 dB	8.00 dB	1.00 dB
	> 85 GHz to 105 GHz	9.00 dB	10.00 dB	8.00 dB	1.00 dB
	> 105 GHz to 110 GHz	9.50 dB	9.00 dB	6.00 dB	1.00 dB
V241C	DC to 18 GHz	8.5 dB	8.95 dB	9.54 dB	
	>18 GHz to 40 GHz	9.5 dB	7.97 dB	8.01 dB	
	>40 GHz to 65 GHz	10.5 dB	6.98 dB	7.04 dB	
K241C	DC to 26.5 GHz	7.5 dB	14.72 dB	14.72 dB	
	>26.5 GHz to 40 GHz	8.5 dB	9.97 dB	11.73 dB	
K241B	DC to 26.5 GHz	7.5 dB	14.72 dB	14.72 dB	







All plots typical.

Environmental (per MIL-STD-202G)

Temperature Shock	–55 °C to +150 °C
Humidity	95% at 40 °C, 96 hours, Test 103B, Condition B
Shock	100 G peak sawtooth, method 213, Condition B
Vibration	Sinewave: 10 Hz to 2000 Hz, 0.06" DA, method 204, test condition D
	Random: 50 Hz to 2000 Hz, 11.6 Grms, Power Spectral Density 0.1 Grms 2 Hz, Method 214, Test Condition 1, Letter D
Salt Spray[1]	5% concentration for 48 hours, Method 101D, Condition B
Voltage withstanding	500 VAC RMS, 60 seconds, method 301

Regulatory Compliance

European Union	RoHS Directive: 2011/65/EU + Amendment 2015/863

Ordering Information

Precision Power Splitters

Part Number	Description
W241A	DC to 110 GHz, W1(m) to W1(f), 50 Ω
W241A-099	Premium Calibration to ISO17025 and ANSI/NCSL Z540-1. Includes calibration certificate, test report, and uncertainty data.
V241C	DC to 65 GHz, V(m) to V(f), 50 Ω
K241C	DC to 40 GHz, K(m) to K(f), 50 Ω
K241B	DC to 26.5 GHz, K(m) to K(f), 50 Ω

1. Salt spray does not apply to the W241A splitters.

