

# RF/Microwave Adapters

DC - 65 GHz



Precision Swept Right Angle Adapters

## INTRODUCTION

With the introduction of the industry's first swept right-angle microwave adapter in the 1970s, the CarlisleIT name has become synonymous with precision RF and Microwave adapters. Since then, we have perfected on our continuous transmission line right-angled design to produce optimally matched low loss adapters for nearly three decades.

We offer a full gender family of straight and right-angle adapters in different connector options, to cover applications ranging from DC-65 GHz. These adapters come standard in a passivated stainless steel body with a captivated Beryllium Copper center conductor to ensure mating repeatability. In addition, options such as gold-plated housing or non-captivated center conductor are also available to fit the desired application. All of our adapters are 100% tested to ensure optimum performance over their respective frequency range.

## KEY FEATURES

- » Complete family of straight & right-angle adapters
- » 50  $\Omega$  Impedance
- » Low VSWR & Insertion Loss
- » Tested per MIL-STD-202



In-Series Adapters



Between-Series Adapters

# RF/Microwave Adapters

## BETWEEN-SERIES ADAPTERS

In order to facilitate adapting from one connector configuration to another, we also offer between-series adapters for different connection types. In this case, the frequency range is limited by the connector with the lower frequency of operation. Similar to the In-series Adapters, options such as gold-plated housing or non-captivated center conductor are also available to fit the desired application.

## CUSTOMIZATION

In addition to our standard offering, CarlisleIT has also built a vast library of modified designs from the myriad of custom solutions we have delivered to our customers. We offer a variety of customized options for adapters, which include non-standard lengths, different connector options, additional testing, etc. Our team of dedicated Engineers can help develop the right solution for your application needs.

Product	Part No.	Description	Options	Freq. Range	Insertion Loss Max.	VSWR	RF Leakage *
Straight In-Series Adapters	223CCSF	K/2.92mm (m) - K/2.92mm (m) adapter	Gold finish available	DC - 40 GHz	0.51 dB	$1.08 + 0.01 \times f(\text{GHz})$	-90 dB
	224CCSF	K/2.92mm (f) - K/2.92mm (f) adapter			0.51 dB	$1.10 + 0.005 \times f(\text{GHz})$	$-90 - f(\text{GHz})$ dB
	225CCSF	K/2.92mm (f) - K/2.92mm (m) adapter					
	V205-1CCSF	V/1.85mm (f) - V/1.85mm (f) adapter	Gold finish available	DC - 65 GHz	0.35 dB	1.25 : 1 (max)	
	V206-1CCSF	V/1.85mm (m) - V/1.85mm (m) adapter					
	5191CCSF	SMA (f) - SMA (f) adapter	Gold finish available	DC - 18 GHz	0.26 dB	$1.10 + 0.008 \times f(\text{GHz})$	$-60 - f(\text{GHz})$ dB
	5299CCSF	SMA (f) - SMA (m) adapter					
	5390CCSF	SMA (m) - SMA (m) adapter					
	8036CCSF	Type N (f) - Type N (m) adapter	Gold finish available	DC - 18 GHz	0.22 dB	$1.09 + 0.008 \sqrt{f(\text{GHz})}$	-90 dB(min) at 2GHz
	8037CCSF	Type N (f) - Type N (f) adapter					
Need P/N	Type N (m) - Type N (m) adapter						
Right Angle In-Series Adapters	220CCSF	K/2.92mm (m) - K/2.92mm (m) adapter	Gold finish available	DC - 40 GHz	0.50 dB	1.5 : 1 (max)	-90 dB (min.) at 2 GHz
	221CCSF	K/2.92mm (f) - K/2.92mm (m) adapter					
	222CCSF	K/2.92mm (f) - K/2.92mm (f) adapter					
	5065CCSF	SMA (m) - SMA (m) adapter	Gold finish available	DC - 18 GHz	0.35 dB	$1.05 + 0.005 \times f(\text{GHz})$	$-65 - f(\text{GHz})$ dB
	5095CCSF	SMA (f) - SMA (f) adapter			0.20 dB		
	5490CCSF	SMA (f) - SMA (m) adapter			0.20 dB		
	8028CCSF	Type N (m) - Type N (m) adapter	Gold finish available	DC - 18 GHz	0.15 dB	1.20 : 1 (max)	-90 dB (min.) at 2 GHz
	8029CCSF	Type N (f) - Type N (f) adapter				1.25 : 1 (max)	
	8030CCSF	Type N (f) - Type N (m) adapter					
	9050CCSF	TNC (f) - TNC (m) adapter	Gold finish available	DC - 18 GHz	0.25 dB	$1.08 + 0.009 \times f(\text{GHz})$	-90 dB (min.) at 2 GHz
	9051CCSF	TNC (f) - TNC (f) adapter					
	9052CCSF	TNC (m) - TNC (m) adapter					
Between-Series Straight Adapters	V203-1CCSF	V/1.85mm (m) - SMK/2.92mm (f) adapter	Gold finish available	DC - 40 GHz	0.50 dB	1.3 : 1 (max)	-90dB (min) at 2 GHz
	V204-1CCSF	V/1.85mm (f) - SMK/2.92mm (m) adapter					
	5014CCSF	SMA (f) - 2.4mm (m) adapter	Gold finish available	DC - 24 GHz	0.25 dB	1.2 : 1 (max)	-90dB (min) at 2 GHz
	5015CCSF	SMA (m) - 2.4mm (m) adapter					
	5016CCSF	SMA (m) - 2.4mm (f) adapter					
	5017CCSF	SMA (f) - 2.4mm (f) adapter	Gold finish available	DC - 18 GHz	0.25 dB	1.2 : 1 (max)	-65dB (min) at 2GHz
	5004CCSF	Type N (m) - SMA (f) adapter					
	5006CCSF	Type N (m) - SMA (m) adapter					
	5008CCSF	Type N (f) - SMA (f) adapter					
5010CCSF	Type N (f) - SMA (m) adapter						