

# 7mm Precision Reference Fixed Flush Shorts

## Model Series 2615

### Description

These true coplanar, reference fixed shorts are designed to terminate an APC7 connector at its mating plane, and are used to establish a reference plane in systems as well as in loss measurements. 2615A3 is a flat face/flat plane short, 2615B3 includes a collet contact to support the inner conductor of series 2653 reference air lines, and 2615D3 has a precision hole (for the same purpose) in place of the collet contact. Two of these shorts are included in Maury 7mm VNA calibration kits; 2615D3 is a component of 2650 series kits, and 2615B3 is a component of 2660 series kits. All of the models shown here are also sold separately as replacement parts or spares.



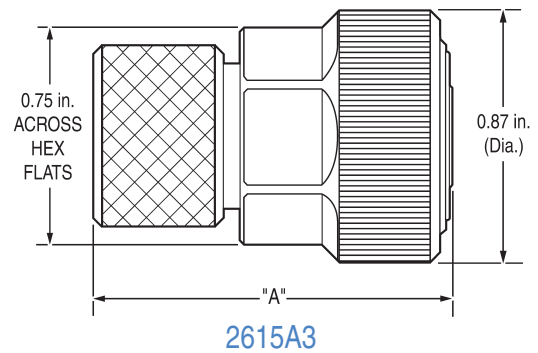
### Specifications

Frequency Range ..... DC to 18.0 GHz  
 Minimum Reflection Coefficient ..... 0.995  
 Nominal Impedance ..... 50 ohm  
 Phase Accuracy .....  $\pm 0.3^\circ$

### Available Models

MODEL	"A" DIMENSION		OFFSET LENGTH	
	INCHES	(CM)	INCHES	(CM)
2615A3	1.250	(3.1750)	0	(0)
2615B3	1.250	(3.1750)	0	(0)
2615D3	1.250	(3.1750)	0	(0)

### Reference Dimensions



# 7mm Precision Fixed Offset Shorts

## Model Series 2649

### Description

These very low loss fixed offset shorts are offset electrically from the reference plane of the APC7 connector established by 2615 series flush shorts. The offset length is held to  $\pm 0.0025$ cm. A set of four (2649A/B/C/D) in a foam-lined wood instrument case can be ordered as model 2649R.



2649C

### Specifications

Frequency Range ..... DC to 18.0 GHz  
 Minimum Reflection Coefficient ..... 0.98  
 Nominal Impedance ..... 50 ohm  
 Phase Accuracy .....  $\pm 2.0^\circ$

### Available Models

MODEL FREQ	"A" DIMENSION		RELATIVE OFFSET LENGTH <sup>1</sup>		1/4- $\lambda$ (GHz)
	INCHES	(CM)	INCHES	(CM)	
2649A	1.583	(4.0208)	0.9833	(2.4976)	3.00
2649B	1.091	(2.7711)	0.4915	(1.2484)	6.00
2649C	1.250	(3.1750)	0.2892	(0.7346)	10.20
2649D	1.250	(3.1750)	0.2070	(0.5258)	14.24

<sup>1</sup> Relative to the 0 (zero) offset of the 2615 series.

### Reference Dimensions

