

Phase Shifters

1-12.4 GHz

Precision Coaxial Phase Shifters



- Broadband Coverage – 180° Phase Shift at Minimum Frequency
- Low VSWR
- $\pm 0.5^\circ/\text{GHz}$ Accuracy with Digital Dial Readout

Specifications

Type N (F), 1 to 5 GHz

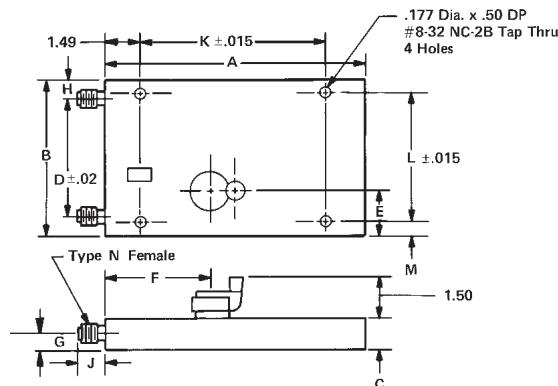
FREQUENCY RANGE (GHz)	MODEL	MINIMUM PHASE SHIFT	POWER		INSERTION LOSS (dB max.)	VSWR (max.)	ACCURACY*	CONNECTORS	WEIGHT (max.)	
			AVERAGE (W)	PEAK (kW)					lbs.	kg.
1-5	3752	180° at 1 GHz	200	5	0.5	1.25	$\pm 0.5^\circ/\text{GHz}$	Type N (F)	4.5	2.05

Type N (F), 3.5 to 12.4 GHz

FREQUENCY RANGE (GHz)	MODEL	MINIMUM PHASE SHIFT	POWER		INSERTION LOSS (dB max.)	VSWR (max.)		ACCURACY*	CONNECTORS	WEIGHT (max.)	
			AVERAGE (W)	PEAK (kW)		3.5-10	10-12.4			lbs.	kg.
3.5-12.4	3753B	180° at 3.5 GHz	200	5	0.7	1.35	1.4	$\pm 0.5^\circ/\text{GHz}$	Type N (F)	4.0	1.8

* Phase must be measured in one rotational direction so as to maintain phase accuracy

Outline Drawing



MODEL	A	B	C	D $\pm .02$	E	F	G	H	J	K $\pm .015$	L $\pm .015$	M
3752	9.03	5.53	1.12	4.13	1.56	3.75	0.56	0.68	0.75	6.00	5.13	0.18
3753B	6.72	4.69	1.28	3.50	1.59	1.13	0.75	0.58	1.23	4.50	4.31	0.17

Dimensions in inches, unless otherwise specified.



DC-40 GHz

Broadband Phase Shifters

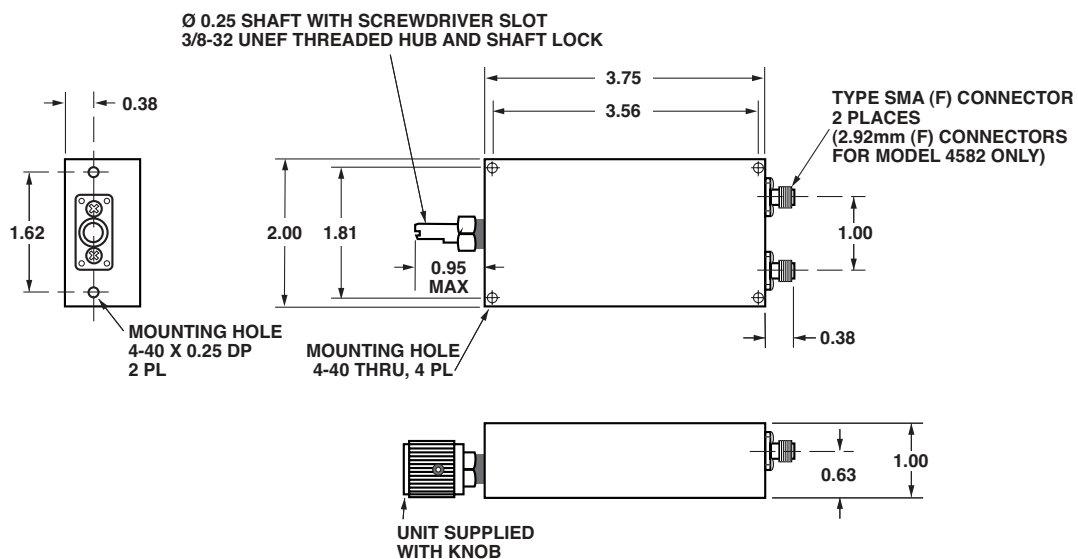
- Broadband Coverage
- Low VSWR
- Adjustable via Knob with Lock Nut

Specifications

SMA (F) and 2.92 mm (F), DC to 40 GHz

FREQUENCY RANGE (GHz)	MODEL	ADJUSTABLE PHASE SHIFT	POWER		INSERTION LOSS (dB max.)	VSWR (max.)	CONNECTORS	WEIGHT (max.)	
			AVERAGE (W)	PEAK (kW)				oz.	gr.
DC-18.6	4579	0-30° / GHz	100	3	1.0	1.6	SMA (F)	10.8	306
DC-26.5	4580	0-30° / GHz	100	3	1.5	2.0	SMA (F)	10.8	306
18.0-26.5	4581	0-360°	100	3	1.5	1.8	SMA (F)	10.8	306
18.0-40.0	4582	0-360°	100	3	2.5	2.0	2.92 mm (F)	10.8	306

Outline Drawing



Dimensions in inches, unless otherwise specified.

Phase Shifters

DC-26 GHz

Broadband 60° Phase Shifters

- Broadband Coverage
- Low VSWR
- Adjustable via Knob with Lock Nut

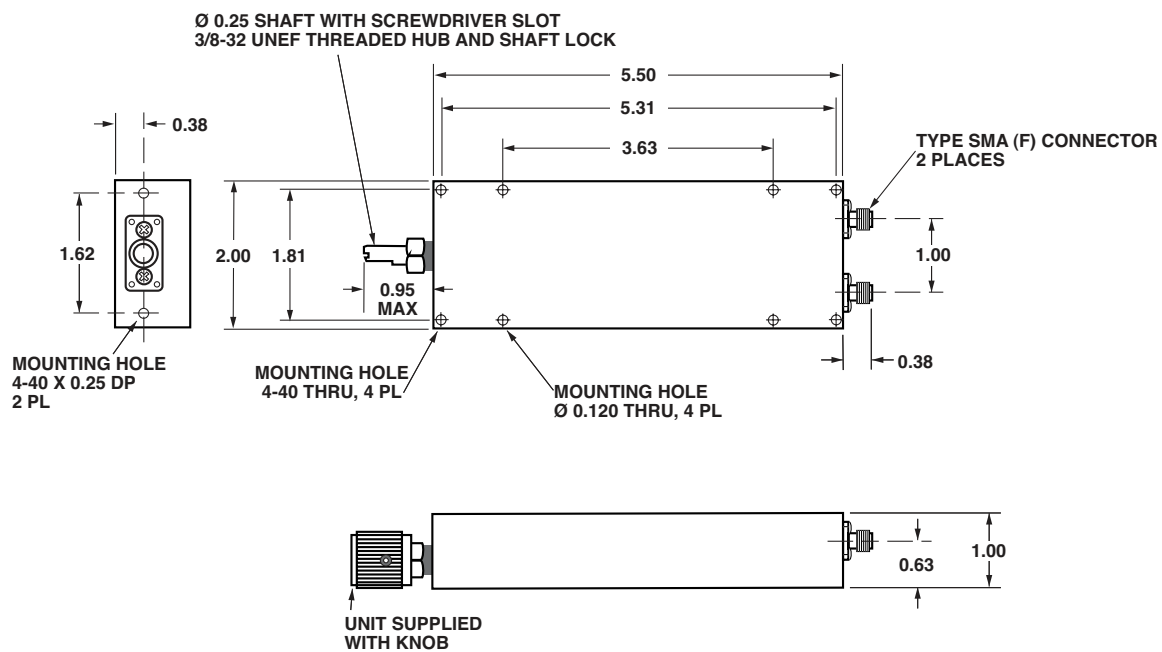


Specifications

SMA (F), DC to 26 GHz

FREQUENCY RANGE (GHz)	MODEL	ADJUSTABLE PHASE SHIFT	POWER		INSERTION LOSS (dB max.)	VSWR (max.)	CONNECTORS	WEIGHT (max.)	
			AVERAGE (W)	PEAK (kW)				oz.	gr.
DC-18.6	4589	0-60° / GHz	100	3	1.0	1.6	SMA (F)	15.4	437
18.0-26.0	4590	0-60° / GHz	100	3	1.5	2.0	SMA (F)	15.4	437

Outline Drawing



Dimensions in inches, unless otherwise specified.



DC-18 GHz

Broadband Phase Shifters

- Broadband Coverage
- Low VSWR
- Adjustable via Micrometer Drive or Knob with Lock Nut (model-dependent)

Specifications

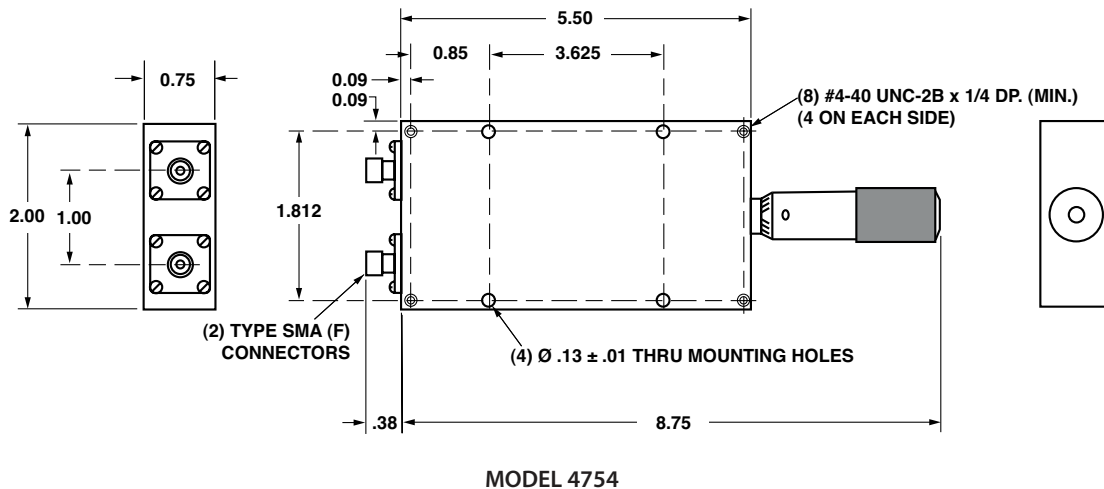
SMA (F), DC to 18 GHz

FREQUENCY RANGE (GHz)	MODEL	MINIMUM PHASE SHIFT	POWER		INSERTION LOSS (dB max.)	VSWR (max.)	CONNECTORS	WEIGHT (max.)	
			AVERAGE (W)	PEAK (kW)				oz.	gr.
DC-18	4754*	60° / GHz 360° at 6 GHz	100	5	DC-8 GHz: 0.50	DC-4 GHz: 1.3	SMA (F)	13.4	380
					8-12 GHz: 0.75	4-12 GHz: 1.5			
					12-18 GHz: 1.00	12-18 GHz: 1.6			
DC-18	4755**	60° / GHz 360° at 6 GHz	100	5	DC-8 GHz: 0.50	DC-4 GHz: 1.3	SMA (F)	15.4	437
					8-12 GHz: 0.75	4-12 GHz: 1.5			
					12-18 GHz: 1.00	12-18 GHz: 1.6			

* Micrometer Drive

** Knob

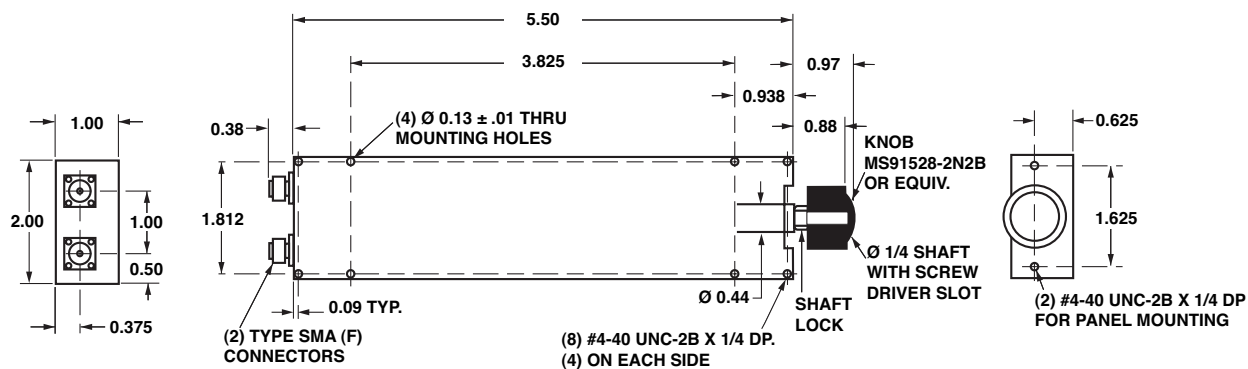
Outline Drawing



Dimensions in inches, unless otherwise specified.

Phase Shifters

Outline Drawing



MODEL 4755

Dimensions in inches, unless otherwise specified.