

## SMA Variable Phase Shifter with an Adjustable Phase of 60 Deg. Per GHz Minimum and from DC - 18.6 GHz



### FM8247A

#### Features

- Adjustable Phase Shifter
- DC to 18.6 GHz Range
- 60 Degree per GHz Minimum Optimized Control Range
- 100 Watts CW Max Input Power
- Insertion Loss 1 dB Max

#### Applications

- Test & Measurements
- Radar Developments
- Military Communication Systems
- Tracking Systems
- Direction Finding Systems
- Antenna Test
- Frequency Translation

#### Description

Coaxial RF Variable phase shifter FM8247A is just one of many radio frequency components specifically stocked to be ready for quick shipment. Fairview Microwave RF variable phase shifter is manufactured with SMA connectors and has a phase adjustment of 60 degrees per GHz minimum. This SMA 60 degrees variable phase shifter is rated for a minimum frequency of DC and a maximum frequency of 18.6 GHz. Fairview Microwave variable phase shifter with SMA connectors has a maximum input power of 100 watts. RF variable phase shifter design for part number FM8247A is rated for a maximum VSWR of 1.6:1. The RF specs for this Fairview variable phase shifting component can be found on its radio frequency phase shifter PDF specifications above.

Our SMA 60 degrees shifter is one radio frequency component of more than one million microwave and millimeter wave RF parts in stock. Fairview Microwave is where to buy a variable phase shifter for quick service and easy worldwide shipment. Fairview also stocks a wide selection of other radio frequency phase shifting products that ship in the same day from our warehouses as with the rest of our other RF/microwave and millimeter wave components.

#### Electrical Specifications (Values at +25° C, Sea Level)

Description	Min	Typ	Max	Units
Frequency Range	DC		18.6	GHz
Impedance		50		Ohms
Phase Adjustment	60			Deg/GHz
Input VSWR			1.6:1	
Insertion Loss			1	dB
Insertion Phase		320		Degrees
Input Power, CW			100	Watts
Input Power, Peak			3	kWatts

Electrical Specification Notes:  
Insertion Phase @ 1 GHz: 320° (min setting)

#### Absolute Maximum Rating

#### Mechanical Specifications

Size	
Length	5.5 in [139.7 mm]
Width/Diameter	2 in [50.8 mm]
Height	1 in [25.4 mm]

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Weight	0.399 lbs [180.98 g]
Body Material and Plating	Aluminum
<b>Configuration</b>	
Input Connector	SMA Female
Output Connector	SMA Female

### Environmental Specifications

#### Temperature

**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

SMA Variable Phase Shifter with an Adjustable Phase of 60 Deg. Per GHz Minimum and from DC - 18.6 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

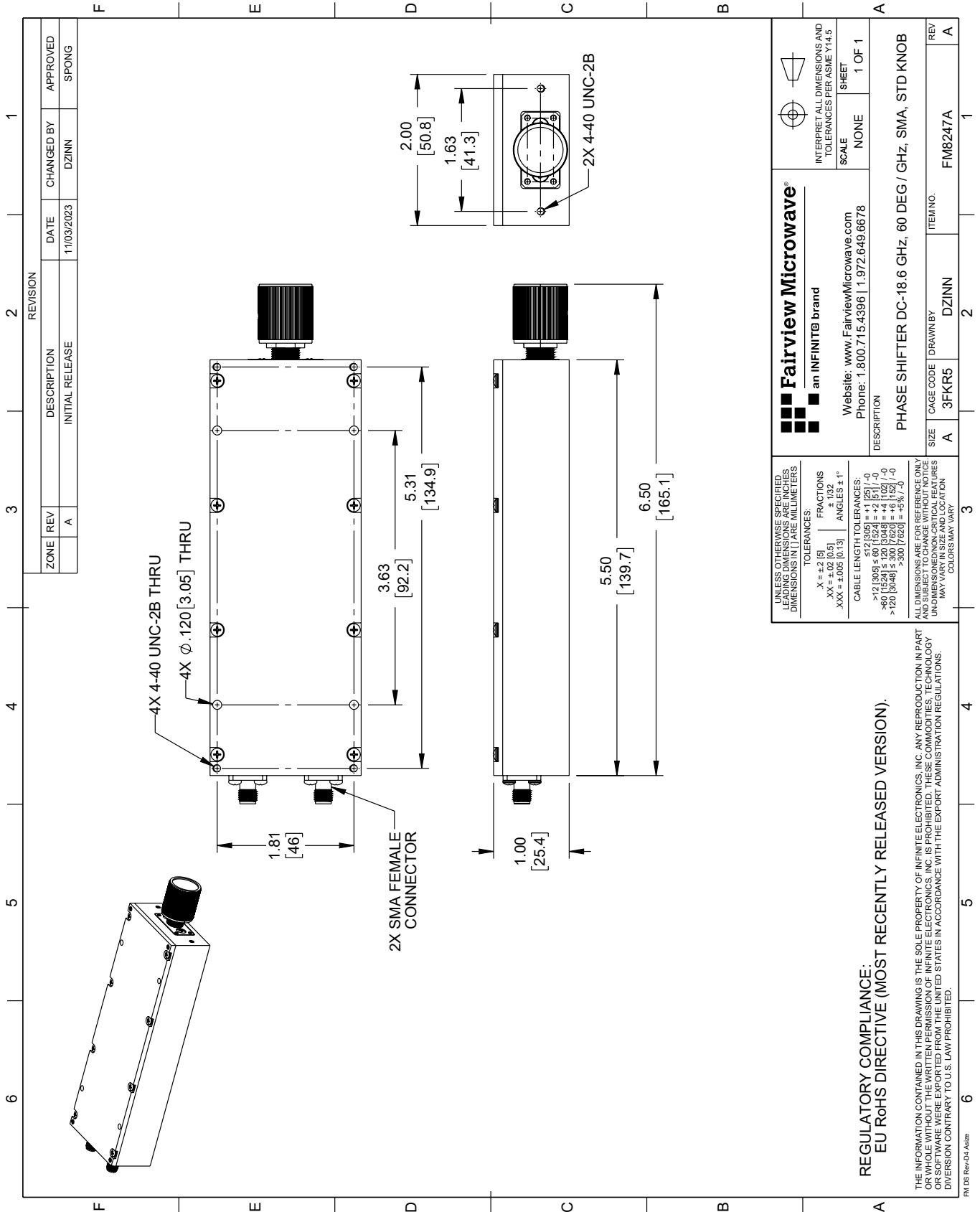
For additional information on this product, please click the following link: [SMA Variable Phase Shifter with an Adjustable Phase of 60 Deg. Per GHz Minimum and from DC - 18.6 GHz FM8247A](#)

URL: <https://www.fairviewmicrowave.com/sma-adjustable-phase-shifter-dc-18.6-ghz-fm8247a-p.aspx>

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to impliment improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

# FM8247A CAD Drawing

SMA Variable Phase Shifter with an Adjustable Phase of 60 Deg. Per GHz Minimum and from DC - 18.6 GHz



REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	11/03/2023	DZINN	SPONG
DESCRIPTION		INITIAL RELEASE		
A				

**Fairview Microwave®**  
an INFINIT® brand

Website: [www.FairviewMicrowave.com](http://www.FairviewMicrowave.com)  
Phone: 1.800.715.4396 | 1.972.649.6678

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE MILLIMETERS.

TOLERANCES:  
.X = ±.2 [5] FRACTIONS ±.132  
.XX = ±.02 [0.5] ANGLES ± 1°  
.XXX = ±.005 [0.13]

CABLE LENGTH TOLERANCES:  
>12 [305] ≤ 60 [1524] = ±.1 [25] / -0  
>60 [1524] ≤ 120 [3048] = ±.2 [5] / -0  
>120 [3048] ≤ 300 [7620] = ±.3 [7.6]

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

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REGULATORY COMPLIANCE:  
EU RoHS DIRECTIVE (MOST RECENTLY RELEASED VERSION).

PHASE SHIFTER DC-18.6 GHz, 60 DEG / GHz, SMA, STD KNOB

SCALE: NONE SHEET: 1 OF 1

ITEM NO. FM8247A

SIZE	CAGE CODE	DRAWN BY	ITEM NO.	REV
A	3FKR5	DZINN	FM8247A	A