

Diplexer, 5 to 1450 MHz Low Pass, 1550 to 2300 MHz High Pass, 75 Ohm Type F Female



SMDP1003

Features

- Frequency range from 5 to 2300 MHz
- High pass band: 1550 to 2300 MHz
- Low pass band: 5 to 1450 MHz
- Max insertion loss 2.5 dB
- 75ohm impedance
- Max VSWR 1.93:1

Applications

- Cable TV/Internet
- Signal Splitting
- Broadcast TV
- MSO

Description

SMDP1003 is a RF diplexer with F-type connectors used to split RF signals with different frequencies. The operating frequency range for this diplexer is from 5 to 2300 MHz. The high pass band is from 1550 to 2300 MHz and low pass band is from 5 to 1450 MHz. This RF diplexer has great insertion loss of 1.5 dB and minimum return loss of 10 dB with 75 ohm impedance. SMDP1003 is part of a broad RF product portfolio from Pasternack which can be shipped the same day with no MOQ.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Impedance		75		Ohms
Common Port				
Frequency	5		2,300	MHz
LPF Port				
Passband Frequency	5		1,450	MHz
Return Loss	10	12		dB
Insertion Loss		1.5	2.5	dB
Rejection Frequency	1550		2,300	MHz
Rejection	25	30		dB
HPF Port				
Passband Frequency	1550		2,300	MHz
Return Loss	10	12		dB
Insertion Loss		1.5	2.5	dB
Rejection Frequency	5		1,450	MHz
Rejection	25	30		dB

Electrical Specification Notes:
Values at 25°C, sea level.

Mechanical Specifications

Size

Length	2.933 in [74.5 mm]
Width	1.299 in [32.99 mm]
Height	0.705 in [17.91 mm]
Weight	0.132 lbs [59.87 g]

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Body Material	Zinc
Body Plating	Zinc
Finish	Polished

Configuration

Design	Bidirectional
Package Style	Connectorized
Connector 1	F Female
Connector 2	F Female
Connector 3	F Female

Environmental Specifications

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

Plotted and Other Data

Notes:

- Values at 25°C, sea level.

FPO Show Me Cables specializes in protection of highly sensitive, low voltage equipment through its patented, non-degrading silicon diode technology and custom filters. Our power quality expertise translates into a diverse product offering including AC, DC, and signal applications as well as integrated cabinets, power distribution panels and EMP hardened devices.

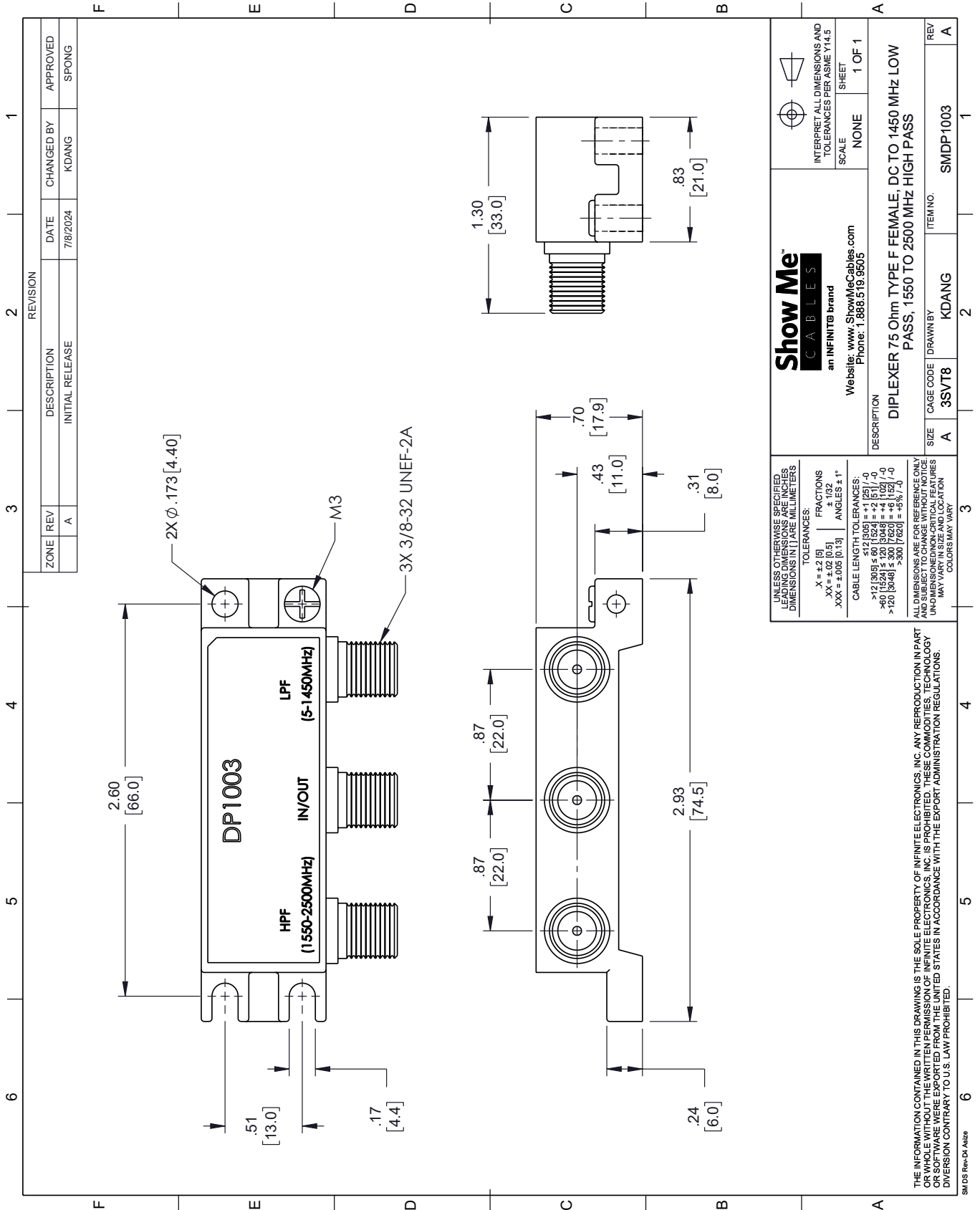
FPO Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Diplexer, 5 to 1450 MHz Low Pass, 1550 to 2300 MHz High Pass, 75 Ohm Type F Female SMDP1003](#)

URL: <https://www.showmecables.com/showmecables-diplexer-75-ohm-type-f-female-dc-to-1450-mhz-low-pass1550-to-2500-mhz-high-pass-p.aspx>

FPO 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. Show Me Cables reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Show Me Cables does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Show Me Cables does not assume liability arising out of the use of any part or document.

SMDP1003 CAD Drawing

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REVISION		DATE	CHANGED BY	APPROVED	
ZONE	REV	DESCRIPTION	DATE <td>CHANGED BY</td> <td>APPROVED</td>	CHANGED BY	APPROVED
	A	INITIAL RELEASE	7/8/2024	KDANG	SPONG

Show Me CABLES
an INFINITE brand
Website: www.ShowMeCables.com
Phone: 1.888.519.9505

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
SCALE: NONE
SHEET: 1 OF 1

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND DIMENSIONS IN [] ARE IN MILLIMETERS.
TOLERANCES:
.X = ±.2 (5)
.XX = ±.02 (0.5)
.XXX = ±.005 (0.13)
FRACTIONS: ± 1/32
ANGLES ± 1°
CABLE LENGTH TOLERANCES:
>12 (305) ≤ 60 (1524) = ±.1 (2.5) / -0
>60 (1524) ≤ 120 (3048) = ±.4 (10) / -0
>120 (3048) ≤ 300 (7620) = ±.8 (20) / -0
ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNDIMENSIONED/NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.

DESCRIPTION: DIPLEXER 75 Ohm TYPE F FEMALE; DC TO 1450 MHz LOW PASS, 1550 TO 2500 MHz HIGH PASS

SIZE	A	CAGE CODE	3SVT8	DRAWN BY	KDANG	ITEM NO.	SMDP1003
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