

Diplexer, 5 to 42 MHz Low Pass, 54 to 1250 MHz High Pass, 75 Ohm Type F Female



SMDP1006

Features

- Frequency range from 5 to 1250 MHz
- High pass band: 54 to 1250 MHz
- Low pass band: 5 to 42 MHz
- Max insertion loss 2.5 dB
- 75ohm impedance
- Max VSWR 1.58:1

Applications

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

Description

SMDP1006 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 1250 MHz. The high pass band is from 54 to 1250 MHz and low pass band is from 5 to 42 MHz. This RF diplexer has great insertion loss of 0.5 dB and minimum return loss of 13 dB with 75 ohm impedance. SMDP1006 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		1,250	MHz
LPF Port				
Passband Frequency	5		42	MHz
Return Loss	14	20		dB
Insertion Loss		0.5	2.2	dB
Rejection Frequency	54		1,250	MHz
Rejection	46	60		dB
HPF Port				
Passband Frequency	54		1,250	MHz
Return Loss	12	16		dB
Insertion Loss		0.5	2.2	dB
Rejection Frequency	5		42	MHz
Rejection	46	55		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.

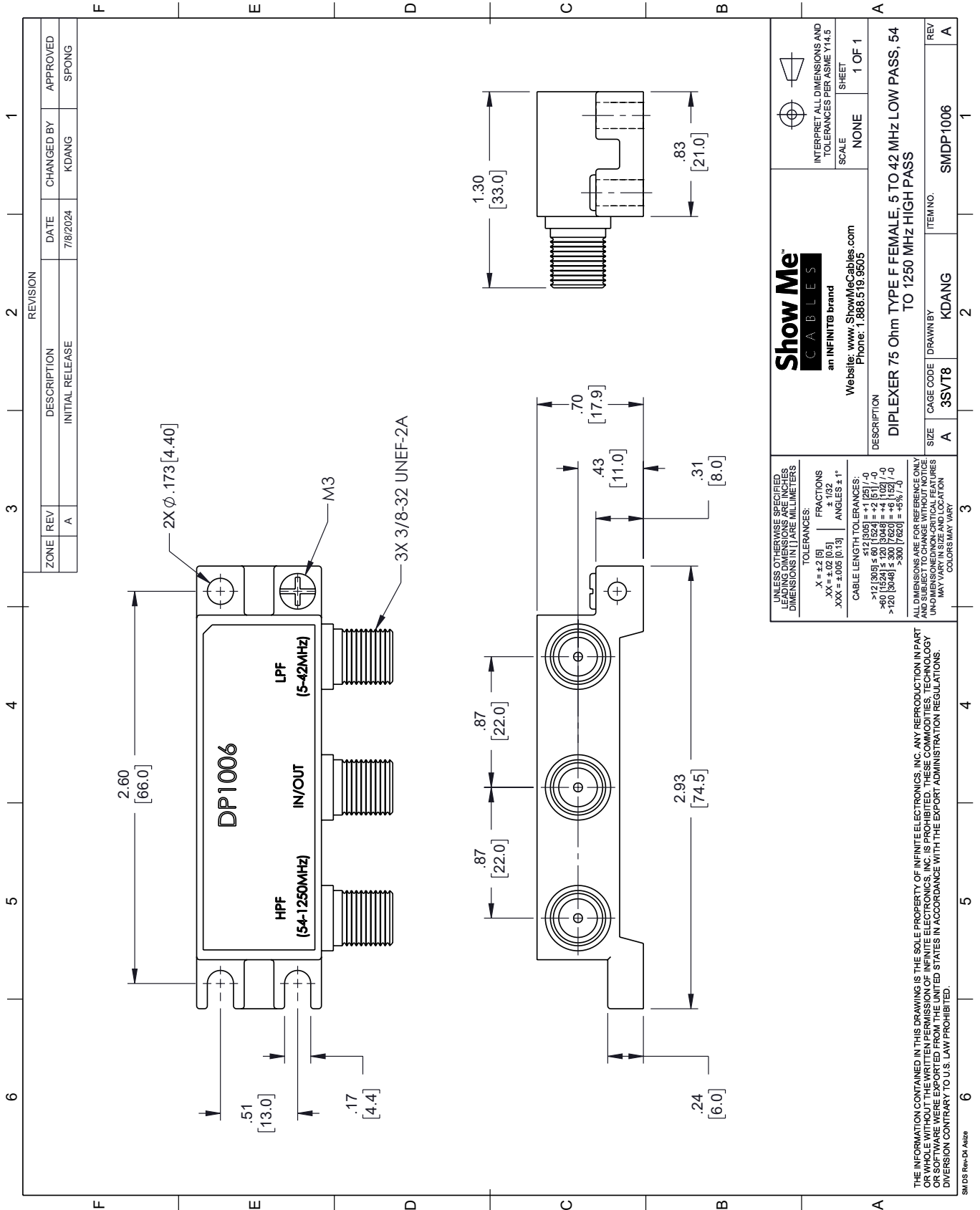
FPO Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Diplexer, 5 to 42 MHz Low Pass, 54 to 1250 MHz High Pass, 75 Ohm Type F Female SMDP1006](#)

URL: <https://www.showmecables.com/showmecables-diplexer-75-ohm-type-f-female-5-to-42-mhz-low-pass54-to-1250-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.

SMDP1006 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

DESCRIPTION: DIPLEXER 75 Ohm TYPE F FEMALE, 5 TO 42 MHz LOW PASS, 54 TO 1250 MHz HIGH PASS

ITEM NO. SMDP1006

SIZE A CAGE CODE 3SVT8 DRAWN BY KDANG

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. 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 (15.24) = ± 1 (25) / -0
 >12 (305) ≤ 60 (1524) = ± 2 (51) / -0
 >60 (1524) ≤ 120 (3048) = ± 4 (102) / -0
 >120 (3048) ≤ 300 (7620) = ± 8 (203) / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE IN MILLIMETERS. UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE IN MILLIMETERS. COLORS MAY VARY.

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