

Diplexer, 5 to 68 MHz and 125 to 1000 MHz TV Band, 87 to 108 MHz FM Band, 75 Ohm Type F Female



SMDP1005

Features

- Frequency range from 5 to 1000 MHz
- TV band: 5 to 68 MHz & 125 to 1000 MHz
- FM band: 87 to 108 MHz
- Max insertion loss 3 dB
- 75ohm impedance
- Max VSWR 1.93:1

Applications

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

Description

SMDP1005 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 1000 MHz. The TV band is from 5 to 68 MHz and 125 to 1000 MHz and FM band is from 87 to 108 MHz. This RF diplexer has great insertion loss of 2 dB and minimum return loss of 10 dB with 75 ohm impedance. SMDP1005 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		1,000	MHz
DC Block			50	V
FM Port				
Passband Frequency	87		108	MHz
Return Loss	10	12		dB
Insertion Loss		2	3	dB
Rejection Frequency	5		68	MHz
Rejection	20	22		dB
Rejection Frequency 2	125		200	MHz
Rejection 2	18	22		dB
Rejection Frequency 3	201		1,000	MHz
Rejection 3	45	50		dB
DC Block			50	V
TV Port				
Passband Frequency	5		68	MHz
Return Loss	10	12		dB
Insertion Loss		0.5	1	dB
Rejection Frequency	87		108	MHz
Rejection	15	20		dB
Passband Frequency 2	125		1,000	MHz
Return Loss 2	10	12		dB

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Insertion Loss 2		0.5	1	dB
DC Block			50	

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]
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.

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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.

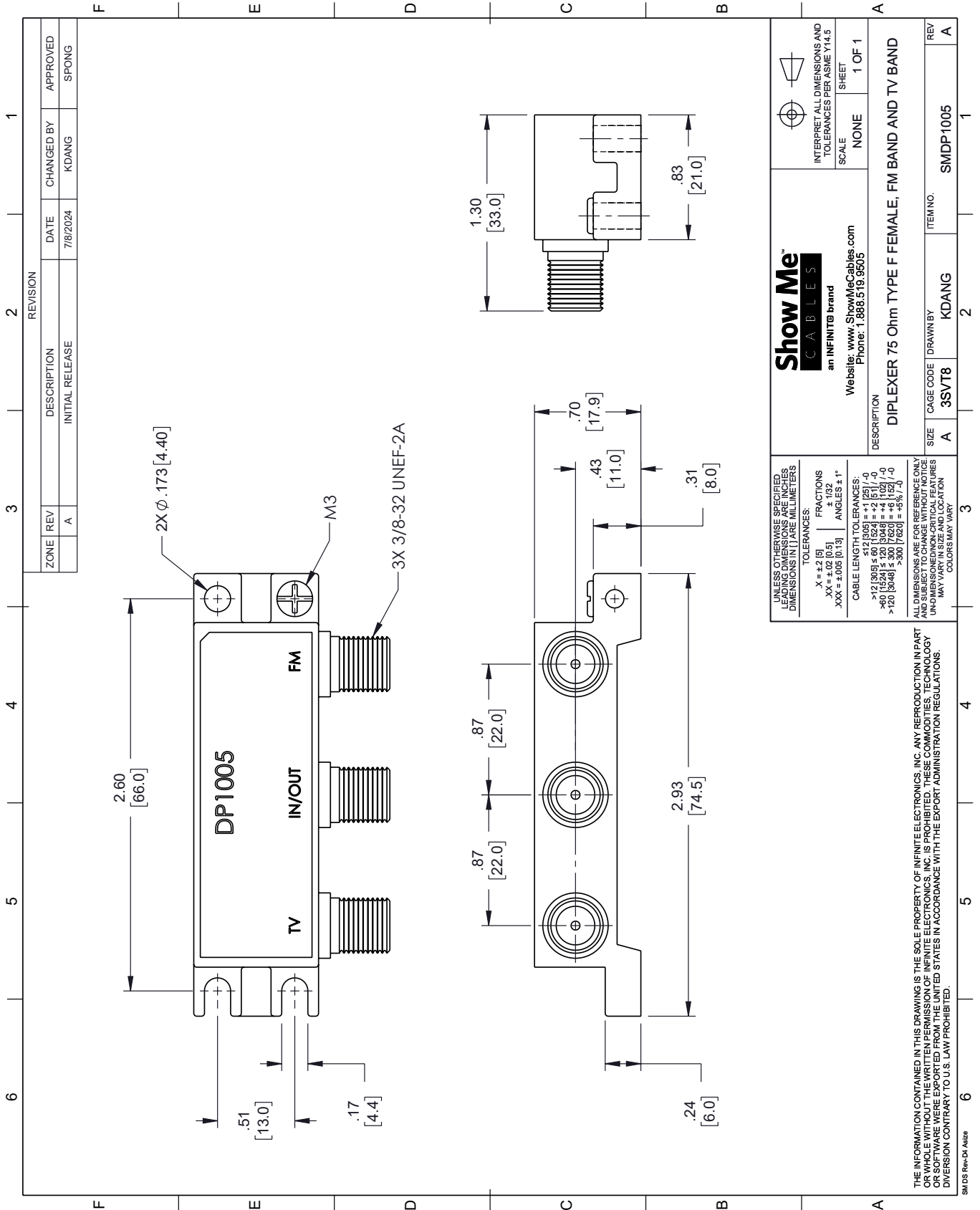
FPO Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Diplexer, 5 to 68 MHz and 125 to 1000 MHz TV Band, 87 to 108 MHz FM Band, 75 Ohm Type F Female SMDP1005](https://www.showmecables.com/showmecables-diplexer-75-ohm-type-f-female-fm-band-and-tv-band-p.aspx)

URL: <https://www.showmecables.com/showmecables-diplexer-75-ohm-type-f-female-fm-band-and-tv-band-p.aspx>

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SMDP1005 CAD Drawing

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REVISION		DATE	CHANGED BY	APPROVED
ZONE	REV	DESCRIPTION	INITIAL RELEASE	
	A			SPONG

Show Me CABLES
an INFINITB 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, FM BAND AND TV BAND

SIZE	A	CAGE CODE	3SVT8	DRAWN BY	KDANG	ITEM NO.	SMDP1005
REV	A						

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES AND TRAILING DIMENSIONS 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) = ±.2 (5) / -0
 >12 (305) ≤ 60 (1524) = ±.4 (10.2) / -0
 >60 (1524) ≤ 120 (3048) = ±.4 (10.2) / -0
 >120 (3048) ≤ 300 (7620) = ±.6 (15.24) / -0
 >300 (7620) = ±.8 (20.32) / -0

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

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