

SMA Male to SMA Male Low PIM Cable Using TFT-402 Coax Using Times Microwave Components



PE3C7976

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: TFT-402
- Coax Flex Type: Flexible

Features

- Max Frequency 5.8 GHz
- Low PIM: -150 dBc Max
- Shielding Effectivity > -80 dB
- 76% Phase Velocity
- Double Shielded
- FEP Jacket

Applications

- General Purpose
- Laboratory Use
- Low PIM Applications
- Indoor and Outdoor Use
- Plenum Rated Applications

Description

Pasternack's PE3C7976 SMA male to SMA male cable using TFT-402 coax is part of our full line of RF components available for same-day shipping. Pasternack's flexible RF cable assemblies are ideal for applications where tight bends and flexure are required. This Pasternack SMA to SMA cable assembly has a male to male gender configuration with 50 ohm flexible TFT-402 coax. The PE3C7976 SMA male to SMA male cable assembly operates to 5.8 GHz. Our low PIM design also offers excellent passive intermodulation performance with PIM levels better than -150 dBc. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than -80 dB.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other available RF cable assembly value added services include connector orientation or clocking, heat shrink booting and custom labeling. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
VSWR			1.4:1	
Velocity of Propagation		76		%
RF Shielding	-80			
Passive Intermodulation IM3 (2x43dBm Tones) at 850 MHz or 1900 MHz			-150	dBc
Capacitance		26.7 [87.6]		pF/ft [pF/m]
DC Resistance Inner Conductor		8.5 [27.89]		Ohms/1000ft [Ohms/Km]

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Electrical Specifications

Description	Minimum	Typical	Maximum	Units
DC Resistance Outer Conductor		5.6 [18.37]		Ohms/1000ft [Ohms/Km]

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.05	0.07	0.1	0.17	0.26	dB/ft
	0.16	0.23	0.33	0.56	0.85	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.15 dB per connector.

Mechanical Specifications

Cable Assembly

Width/Diameter .374 in [9.5 mm]

Cable

Cable Type TFT-402
 Impedance 50 Ohms
 Inner Conductor Type Solid
 Inner Conductor Material and Plating Copper, Silver
 Dielectric Type PTFE
 Number of Shields 2
 Shield Layer 1 Silver Plated Copper Braid
 Shield Layer 2 Tinned Copper Braid
 Jacket Material FEP, Blue
 Jacket Diameter 0.16 in [4.06 mm]
 One Time Minimum Bend Radius 0.75 in [19.05 mm]

SMA Male to SMA Male Low PIM Cable Using TFFT-402 Coax Using Times Microwave Components



PE3C7976

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Brass, Silver	Brass, Silver
Contact Plating Specification	5 µm	5 µm
Dielectric Type	PTFE	PTFE
Body Material and Plating	Brass, Silver	Brass, Silver
Body Plating Specification	5 µm	5 µm
Coupling Nut Material and Plating	Brass, Copper Clad Aluminum	Brass, Copper Clad Aluminum
Coupling Nut Plating Specification	3 µm	3 µm
Torque	9 in-lbs 1.02 Nm	9 in-lbs 1.02 Nm

Environmental Specifications

Operating Range Temperature -55 to +150 deg C

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

Plotted and Other Data

Notes:

SMA Male to SMA Male Low PIM Cable Using TFT-402 Coax Using Times Microwave Components



PE3C7976

Typical Performance Data

How to Order

Part Number Configuration:

PE3C7976

- xx

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3C7976-12 = 12 inches long cable
PE3C7976-100cm = 100 cm long cable

SMA Male to SMA Male Low PIM Cable Using TFT-402 Coax Using Times Microwave Components from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SMA Male Low PIM Cable Using TFT-402 Coax Using Times Microwave Components PE3C7976](#)

URL: <https://www.pasternack.com/sma-male-sma-male-tft-402-cable-assembly-pe3c7976-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 implement improvements. Pasternack Enterprises reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack Enterprises does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack Enterprises does not assume liability arising out of the use of any part or document.

PE3C7976 CAD Drawing

SMA Male to SMA Male Low PIM Cable Using TFT-402 Coax Using Times Microwave Components

REVISIONS		DATE	APPROVED
REV.	DESCRIPTION	DATE	APPROVED
B	PCR PE3C7959, 20220517 AND PE3C7948, 20210610	5/17/22	SRAUTUS

2X SHRINK TUBE,
BLACK
2ND ONE OVER 1ST

2X SHRINK TUBE,
BLACK
2ND ONE OVER 1ST

2X SMA MALE

TFT-402

PE LABEL

PIM LABEL

WWW.PASTERNAK.COM
PASTERNAK P/N
(SEE NOTE 1)

SERIAL #
PIM LEVEL
-ZZZdBC
(SEE NOTE 2)

LENGTH MEASURED FROM
CONTACT TO CONTACT

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

TOLERANCES:

.X = ±.2 [5.08] FRACTIONS ±.192

.XX = ±.02 [51] ANGLES ± 1°

.XXX = ±.005 [13] CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] = ±1 [25] /-0

12 [305] < L ≤ 60 [1524] = ±2 [51] /-0

60 [1524] < L ≤ 120 [3048] = ±4 [102] /-0

120 [3048] < L ≤ 300 [7620] = ±6 [152] /-0

300 [7620] < L = +9%L /-0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

NOTES:

- CABLES 84" AND UNDER HAVE 1 LABEL CENTERED. CABLES OVER 84" HAVE 2 LABELS, ONE AT EACH END 12" FROM THE FRONT OF THE CONNECTOR.
- PIM LABEL 6" FROM CABLE END 1 PLACE.

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE N/A

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SIZE A CAGE CODE 53919 DRAWN BY DFRISIELLO ITEM NO. PE3C7976 REV B