

SMA Male to SMA Male Cable Using TCOM-240 Coax



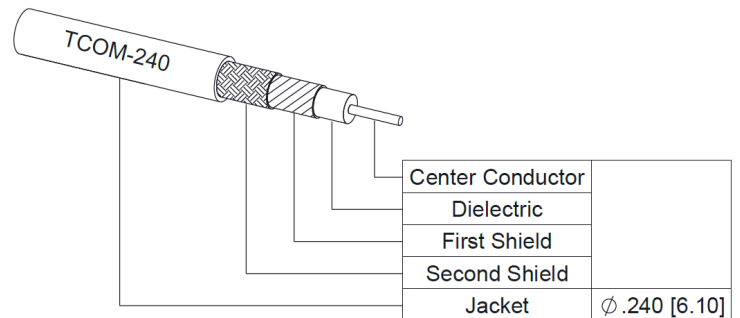
PE3W18725

Configuration

- Connector 1: SMA Male
- Connector 2: SMA Male
- Cable Type: TCOM-240
- Coax Flex Type: Flexible

Features

- Max Frequency 8 GHz
- Shielding Effectivity > 100 dB
- 84% Phase Velocity
- Double Shielded
- PE Jacket



Applications

- General Purpose
- Laboratory Use

Description

Pasternack's PE3W18725 SMA male to SMA male cable using TCOM-240 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 TCOM-240 coax. The PE3W18725 SMA male to SMA male cable assembly operates to 8 GHz. The double shielding of this Pasternack cable assembly provides excellent shielding effectiveness of better than 100 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		8	GHz
VSWR			1.4:1	
Velocity of Propagation		84		%
RF Shielding	100			dB
Group Delay		1.21 [3.97]		ns/ft [ns/m]
Capacitance		24.2 [79.4]		pF/ft [pF/m]
Inductance		0.06 [0.2]		uH/ft [uH/m]
DC Resistance Inner Conductor		3.2 [10.5]		Ohms/1000ft [Ohms/Km]
DC Resistance Outer Conductor		2.06 [6.76]		Ohms/1000ft [Ohms/Km]

SMA Male to SMA Male Cable Using TCOM-240 Coax



PE3W18725

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Jacket Spark			5,000	Vrms

Specifications by Frequency

Part Number	Length	Description	F1	F2	F3	F4	F5	Units	Weight (lbs)
			Frequency					MHz	
PE3W18725	Custom Lengths Available	Insertion Loss (Typ.)	0.036	0.052	0.075	0.123	0.23	dB/ft	
			0.12	0.18	0.25	0.41	0.76	dB/m	
PE3W18725-6	6 inch	Insertion Loss (Typ.)	0.22	0.23	0.24	0.27	0.32	dB	0.057
PE3W18725-9	9 inch	Insertion Loss (Typ.)	0.23	0.24	0.26	0.3	0.38	dB	0.0645
PE3W18725-12	12 inch	Insertion Loss (Typ.)	0.24	0.26	0.28	0.33	0.43	dB	0.072
PE3W18725-18	18 inch	Insertion Loss (Typ.)	0.26	0.28	0.32	0.39	0.55	dB	0.087
PE3W18725-24	24 inch	Insertion Loss (Typ.)	0.28	0.31	0.35	0.45	0.66	dB	0.102

The insertion loss data for the base model does not include loss due to the connectors. Each length includes insertion loss due to the connectors.

Loss due to Connector 1:	0.1 dB
Loss due to Connector 2:	0.1 dB
Base Weight:	0.072 pounds
Additional Weight per Inch:	0.0025 pounds

Mechanical Specifications

Cable Assembly

Width/Diameter	0.375 in [9.53 mm]
Weight	0.072 lbs [32.66 g]

Cable

Cable Type	TCOM-240
Impedance	50 Ohms
Inner Conductor Type	Solid
Inner Conductor Material and Plating	Copper
Dielectric Type	PE (F)
Number of Shields	2
Shield Layer 1	Silver Plated Copper Braid
Shield Layer 2	Tinned Copper Braid
Jacket Material	PE, Black
Jacket Diameter	0.24 in [6.1 mm]
One Time Minimum Bend Radius	0.75 in [19.05 mm]
Repeated Minimum Bend Radius	2.5 in [63.5 mm]
Bending Moment	0.25 lbs-ft [0.34 N-m]
Flat Plate Crush	20 lbs/in [0.36 Kg/mm]
Tensile Strength	80 lbs [36.29 Kg]

SMA Male to SMA Male Cable Using TCOM-240 Coax



PE3W18725

Connectors

Description	Connector 1	Connector 2
Type	SMA Male	SMA Male
Specification	MIL-STD-348	MIL-STD-348
Impedance	50 Ohms	50 Ohms
Configuration	Straight	Straight
Contact Material and Plating	Beryllium Copper, Gold	Beryllium Copper, Gold
Contact Plating Specification	ASTM B488	ASTM B488
Dielectric Type	PTFE	PTFE
Outer Conductor Material and Plating	Passivated Stainless Steel, Gold	Passivated Stainless Steel, Gold
Body Material and Plating	Passivated Stainless Steel, Gold	Passivated Stainless Steel, Gold
Body Plating Specification	SAE-AMS-2700	SAE-AMS-2700
Coupling Nut Material and Plating	Passivated Stainless Steel	Passivated Stainless Steel
Coupling Nut Plating Specification	SAE-AMS-2700	SAE-AMS-2700

Environmental Specifications

Operating Range Temperature -40 to +85 deg C

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

Plotted and Other Data

Notes:

SMA Male to SMA Male Cable Using TCOM-240 Coax



PE3W18725

Typical Performance Data

How to Order

Part Number Configuration:

PE3W18725

- xx

uu

Unit of Measure:

cm = Centimeters

<blank> = Inches

Length

Base Number

Example: PE3W18725-12 = 12 inches long cable
PE3W18725-100cm = 100 cm long cable

SMA Male to SMA Male Cable Using TCOM-240 Coax 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.

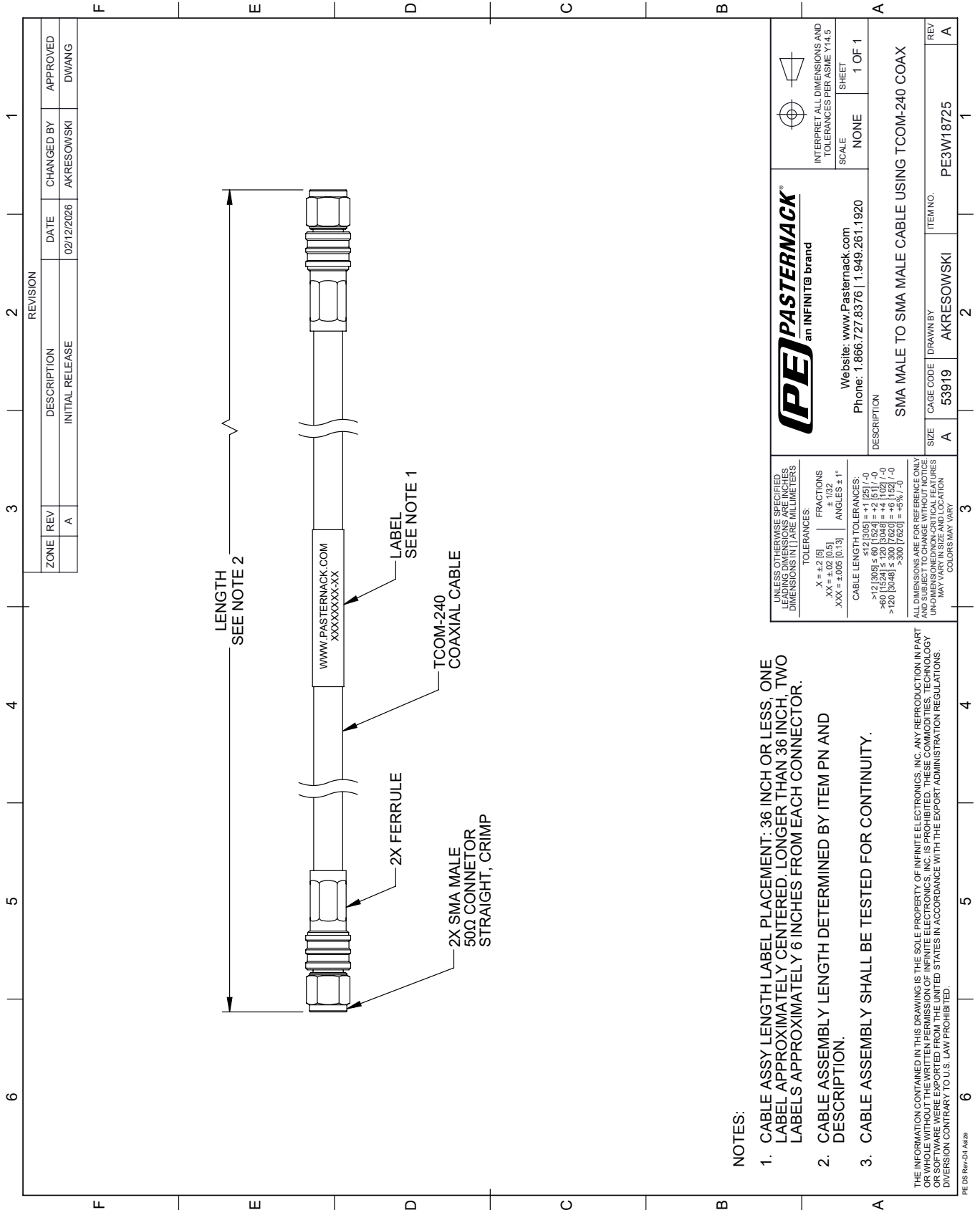
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male to SMA Male Cable Using TCOM-240 Coax PE3W18725](#)

URL: <https://www.pasternack.com/sma-male-to-sma-male-cable-using-tcom-240-pe3w18725-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.

PE3W18725 CAD Drawing

SMA Male to SMA Male Cable Using TCOM-240 Coax



- NOTES:**
1. CABLE ASSY LENGTH LABEL PLACEMENT: .36 INCH OR LESS, ONE LABEL APPROXIMATELY CENTERED. LONGER THAN 36 INCH, TWO LABELS APPROXIMATELY 6 INCHES FROM EACH CONNECTOR.
 2. CABLE ASSEMBLY LENGTH DETERMINED BY ITEM PN AND DESCRIPTION.
 3. CABLE ASSEMBLY SHALL BE TESTED FOR CONTINUITY.

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVISION CONTRARY TO U.S. LAW PROHIBITED.

 an INFINITE brand		 INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
Website: www.Pasternack.com Phone: 1.866.727.8376 1.949.261.1920		SCALE: NONE SHEET: 1 OF 1
DESCRIPTION SMA MALE TO SMA MALE CABLE USING TCOM-240 COAX		
SIZE: A	CAGE CODE: 53919	DRAWN BY: AKRESOWSKI
ITEM NO.: PE3W18725	REV: A	SHEET: 1 OF 1

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE 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 [25] / -0
 >60 [1524] ≤ 120 [3048] = ±.4 [102] / -0
 >120 [3048] ≤ 300 [7620] = ±.6 [152] / -0
 >300 [7620] = ±.9 [229] / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY. DIMENSIONS OF PARTS MAY VARY FROM DIMENSIONS OF ASSEMBLY. DIMENSIONS OF NON-CRITICAL FEATURES MAY VARY IN SIZE AND LOCATION. COLORS MAY VARY.