



# SMA Male Right Angle Connector Crimp/Solder Attachment for LMR-240, PE-C240

## RF Connectors Technical Data Sheet



**TC-240-SM-RA-SS-D**

### Times Microwave Systems Connector Specification

#### Configuration

- SMA Male Connector
- 50 Ohms
- Right Angle Body Geometry
- Connector Interface Types: LMR-240, PE-C240

#### Features

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.3:1
- Gold Plated Brass Contact
- 50 µin contact plating

#### Applications

- General Purpose Test
- Custom Cable Assemblies

#### Description

Pasternack's TC-240-SM-RA-SS-D Right Angle, SMA, Standard, Connector is part of our full line of RF components available for same-day shipping. Our SMA male connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1. Its right angle body geometry allows for easier connections in tight spaces.

Our SMA male right angle connector TC-240-SM-RA-SS-D datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

#### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.3:1	
Insertion Loss			0.25	dB
Operating Voltage (AC)			500	Vrms
Impedance		50		Ohms
Dielectric Withstanding Voltage (AC)			1,000	Vrms
Insulation Resistance	5,000			MOhms

#### Mechanical Specifications

Size	
Length	0.56 in [14.10 mm]
Width	0.31 in [7.92 mm]
Height	0.05 in [1.37 mm]
Weight	0.02 lbs [8.16 g]
Mating Cycles	500 Cycles

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [SMA Male Right Angle Connector Crimp/Solder Attachment for LMR-240, PE-C240 TC-240-SM-RA-SS-D](#)



## SMA Male Right Angle Connector Crimp/Solder Attachment for LMR-240, PE-C240

### RF Connectors Technical Data Sheet



**TC-240-SM-RA-SS-D**

Mating Torque	7 to 10 in-lbs [0.79 to 1.13 Nm]
Cable Retention Force	60 lbs [27.22 kg]

#### Material Specifications

Description	Material	Plating
Contact	Brass	Gold 50 µin
Insulation	PTFE	
Body	Passivated Stainless Steel	
Coupling Nut	Passivated Stainless Steel	

#### Environmental Specifications

##### Temperature

Operating Range	-40 to +125 deg C
Shock	MIL-STD 202G, Meth. 213, Cond. I
Vibration	MIL-STD 202G, Meth. 204, Cond. D
Thermal Shock	MIL-STD 202G, Meth. 107, Cond. B

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

#### Plotted and Other Data

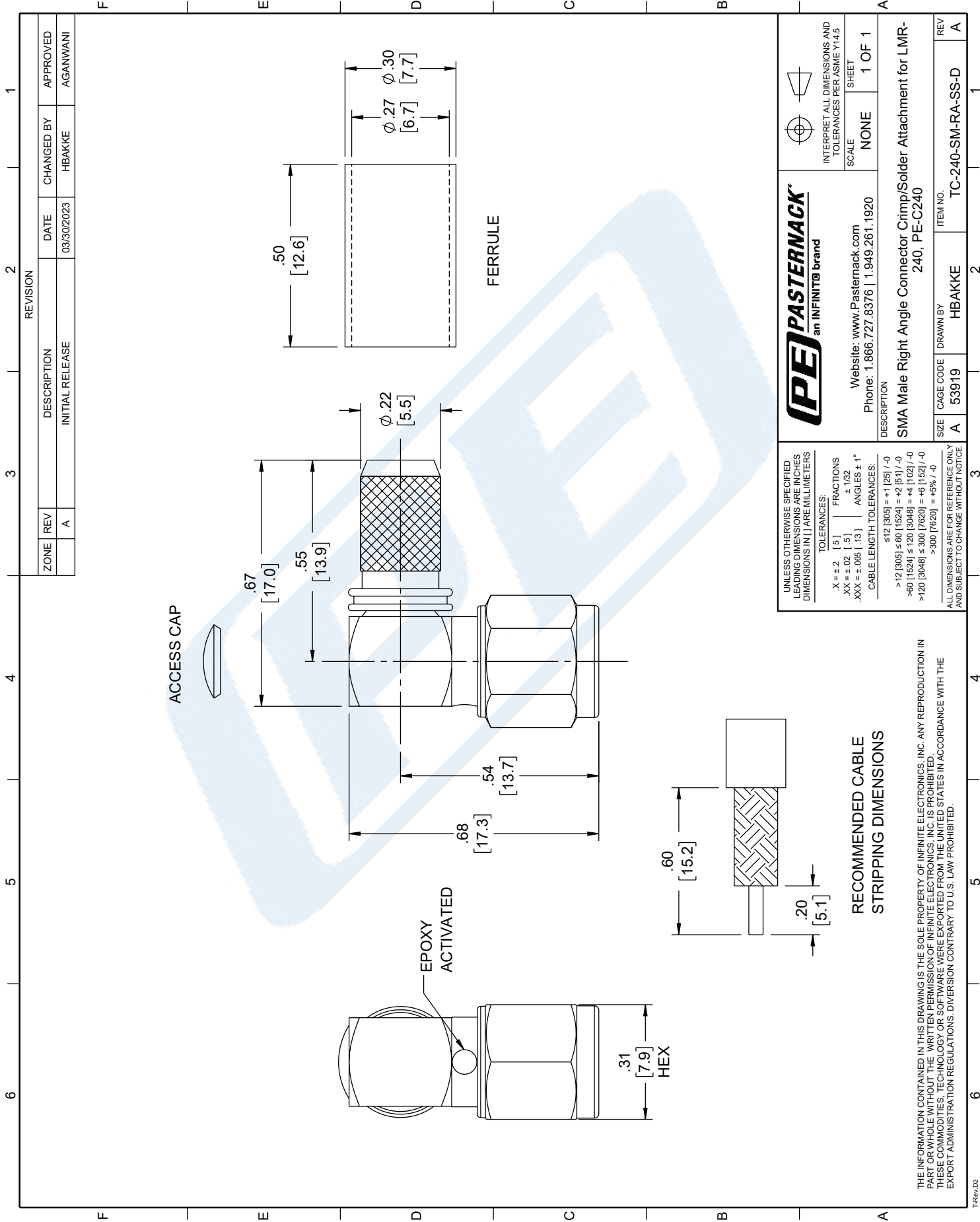
Notes:

SMA Male Right Angle Connector Crimp/Solder Attachment for LMR-240, PE-C240 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 Right Angle Connector Crimp/Solder Attachment for LMR-240, PE-C240 TC-240-SM-RA-SS-D](#)

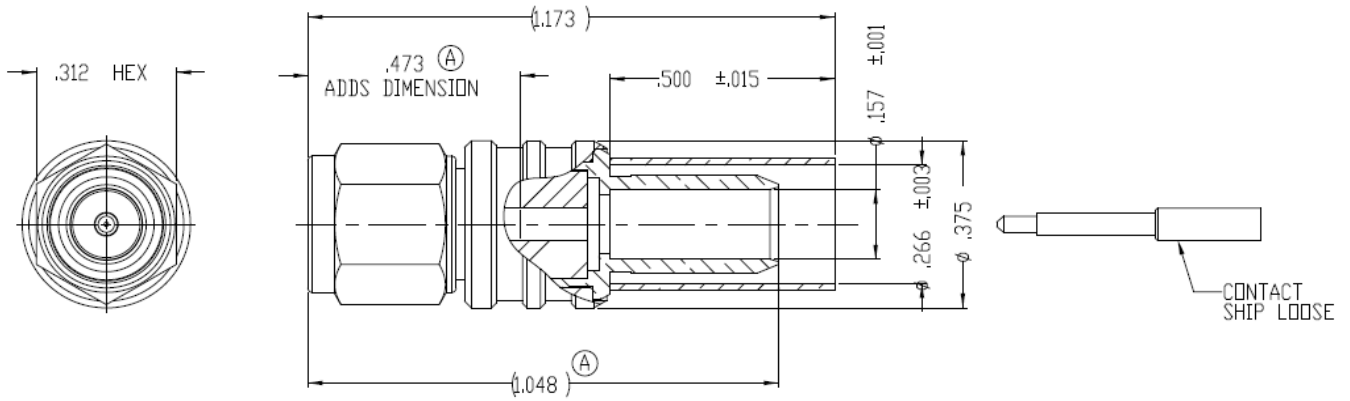
URL: <https://www.pasternack.com/sma-male-lmr-240-pe-c240-connector-tc-240-sm-ra-ss-d-p.aspx>

The information contained in 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 reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.



**NOTICE OF PROPRIETARY RIGHTS** THIS DOCUMENT CONTAINS CONFIDENTIAL TECHNICAL DATA, INCLUDING TRADE SECRETS, PROPRIETARY TO TIMES MICROWAVE SYSTEMS. DISCLOSURE OF THIS DATA IS EXPRESSLY CONDITIONED UPON YOUR ASSENT THAT ITS USE IS LIMITED TO USE WITHIN YOUR COMPANY ONLY. ANY OTHER USE IS STRICTLY PROHIBITED WITHOUT THE PRIOR WRITTEN CONSENT OF TIMES MICROWAVE SYSTEMS.

SYM	REVISION DESCRIPTION	DFTM	DATE	APPD	DATE
A	RELEASED FOR PRODUCTION	N. N. N	9/4/13	J. D. B.	9/10/13



**NOTES:**

- ASSEMBLED CONNECTOR INTERFACE IS DESIGNED IN ACCORDANCE WITH MIL-STD-348
- MATERIAL:**

CLAMP & CONTACT - BRASS PER ASTM B16, C36000 ALLOY, TEMPER H02  
 BODY, CNUT - STAINLESS STEEL PER ASTM 582, S30300 ALLOY, COND. A  
 INSULATOR - TEFLON PER ASTM D1710, TYPE 1, GRADE 1, CLASS A  
 GASKET - SILICONE RUBBER PER A-A-59588, 50-75 DUROMETER  
 SHRINK SLEEVE - HEAT SHRINKABLE ATUM PER MIL-I-23053/4 (NOT SHOWN)  
 CRIMP SLEEVE - D.H.P. COPPER CDA, ALLOY #122, TEMPER HARD  
 CONTACT & LOCKING RING - BERYLLIUM COPPER PER ASTM B196, C17300 ALLOY, CONDITION HT

- FINISH:**  
 CONTACT - GOLD PLATE PER ASTM B488  
 CRIMP SLEEVE - SULFAMATE NICKEL PER MIL-P-27418  
 CLAMP - NICKEL PLATE PER AMS-QQ-N-290  
 C'NUT & BODY - PASSIVATE PER SAE-AMS-2700

MATL:	UNLESS OTHERWISE SPECIFIED		DFTM. N. N. N	TIMES MICROWAVE SYSTEMS	
	ALL DIMENSIONS ARE IN INCHES MACHINED SURFACES FINISH 63 RMS MAX. REMOVE ALL BURRS .004 MAX. BREAK MACHINE CORNERS .005 MAX. FILLET R. TOLERANCES ON DECIMALS . XX ± .01 . XXX ± .005 ANGLES ± 1° FRACTIONS ± 1/64		DATE 9/4/13		
USED ON: A	DO NOT SCALE DRAWING		CHKD. J. D. B.	TC-240-SM-SS-X CONNECTOR ASSEMBLY SMAM for LMR-240	
			DATE 9/10/13		
SCALE: NONE	DWG. SIZE A	CODE IDENT 68999	APPD. J. D. B.	DATE 9/10/13	1 of 1
				SD3190-2898	A



## Low PIM Flexible TCOM-240 Coax Cable Double Shielded with Black PE Jacket

### RF Cables Technical Data Sheet

## Times Microwave Systems Coax Cable Specification Configuration

- Low PIM Flexible Cable
- 2 Shield(s)

### Description

TCOM-240 part number from Pasternack is a low PIM coax cable that is flexible. Pasternack flexible coax RF cable has an impedance of 50 Ohm and a Foam PE dielectric. Our TCOM-240 coax cable is constructed with a 0.24-inch jacket made of polyethylene. This coaxial cable has a dielectric withstanding voltage of 1500 Vdc.

The TCOM-240 flexible RF cable has a shield count of 2 and RF shielding of 100 dB. Our coax cable from Pasternack has a maximum frequency of 10 GHz. The maximum passive intermodulation of this low PIM cable is -155 dBc. Additional specifications for this TCOM-240 double-shielded RF coaxial cable are on our downloadable PDF datasheet above.

Our TCOM-240 coax cable can operate at temperatures ranging from -40 to 85 degrees C. This black-colored flexible RF cable with a 50 Ohm impedance has a typical insertion loss/maximum attenuation of 26.2 dB/100ft at a frequency of 10 GHz. The TCOM-240 flexible RF cable has a solid copper center conductor. This coaxial cable features a dual shield of tinned copper braid over the silver plated copper braid.

Pasternack TCOM-240 low PIM coax cables are part of over 40,000 RF, microwave, and millimeter wave components. These flexible cables and our other RF parts are available for same-day shipping worldwide. Custom RF cable assemblies using TCOM-240 or other coax can be built and shipped the same business day as well.

### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		10	GHz
Impedance		50		Ohms
Velocity of Propagation		84		%
Time Delay		1.21 [3.97]		ns/ft [ns/m]
Shielding Effectiveness	100			dB
Passive Intermodulation			-155	dBc
Dielectric Withstanding Voltage (DC)			1,500	Vdc
Jacket Spark			5,000	Vrms
Inner Conductor DC Resistance			3.2	Ohms/1000ft
Outer Conductor DC Resistance			2.06	Ohms/1000ft
Nominal Capacitance		24.2 [79.4]		pF/ft [pF/m]
Nominal Inductance		0.06 [0.2]		uH/ft [uH/m]
Input Power (Peak)			5.6	kWatts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low PIM Flexible TCOM-240 Coax Cable Double Shielded with Black PE Jacket TCOM-240](#)



## Low PIM Flexible TCOM-240 Coax Cable Double Shielded with Black PE Jacket

### RF Cables Technical Data Sheet

#### Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.15	0.22	0.45	0.9	1.5	GHz
Attenuation, Typ	2.9	3.5	5	7.2	9.4	dB/100ft
	9.51	11.48	16.4	23.62	30.84	dB/100m
Input Power (CW), Max	700	570	400	280	210	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	1.8	2	2.5	5.8	10	GHz
Attenuation, Typ	10.3	10.9	12.3	19.4	26.2	dB/100ft
	33.79	35.76	40.35	63.65	85.96	dB/100m
Input Power (CW), Max	190	180	160	100	70	Watts

#### Mechanical Specifications

Diameter	0.24 in [6.1 mm]
Weight	0.03 lbs/ft [0.04 kg/m]
Min. Bend Radius (Installation)	0.75 in [19.05 mm]
Min. Bend Radius (Repeated)	2.5 in [63.5 mm]
Bending Moment	0.25 lbs-ft [0.34 N-m]
Tensile Strength	80 lbs [36.29 kg]
Flat Plate Crush	20 lbs/in [0.36 kg/mm]

#### Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, 1 Strand	0.056 in [1.42 mm]
Conductor Type	Solid	
Dielectric	PE (F)	0.15 in [3.81 mm]
First Shield	Silver Plated Copper Braid	0.16 in [4.06 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Low PIM Flexible TCOM-240 Coax Cable Double Shielded with Black PE Jacket TCOM-240](#)



Low PIM Flexible TCOM-240 Coax Cable  
Double Shielded with Black PE Jacket

**RF Cables**  
**Technical Data Sheet**

Second Shield	Tinned Copper Braid	0.188 in [4.78 mm]
Jacket	PE, Black	0.24 in [6.1 mm]

**Environmental Specifications**

**Temperature**

Operating Range	-40 to +85 deg C
Installation Range	-40 to +85 deg C
Storage Range	-70 to +85 deg C

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

**Plotted and Other Data**

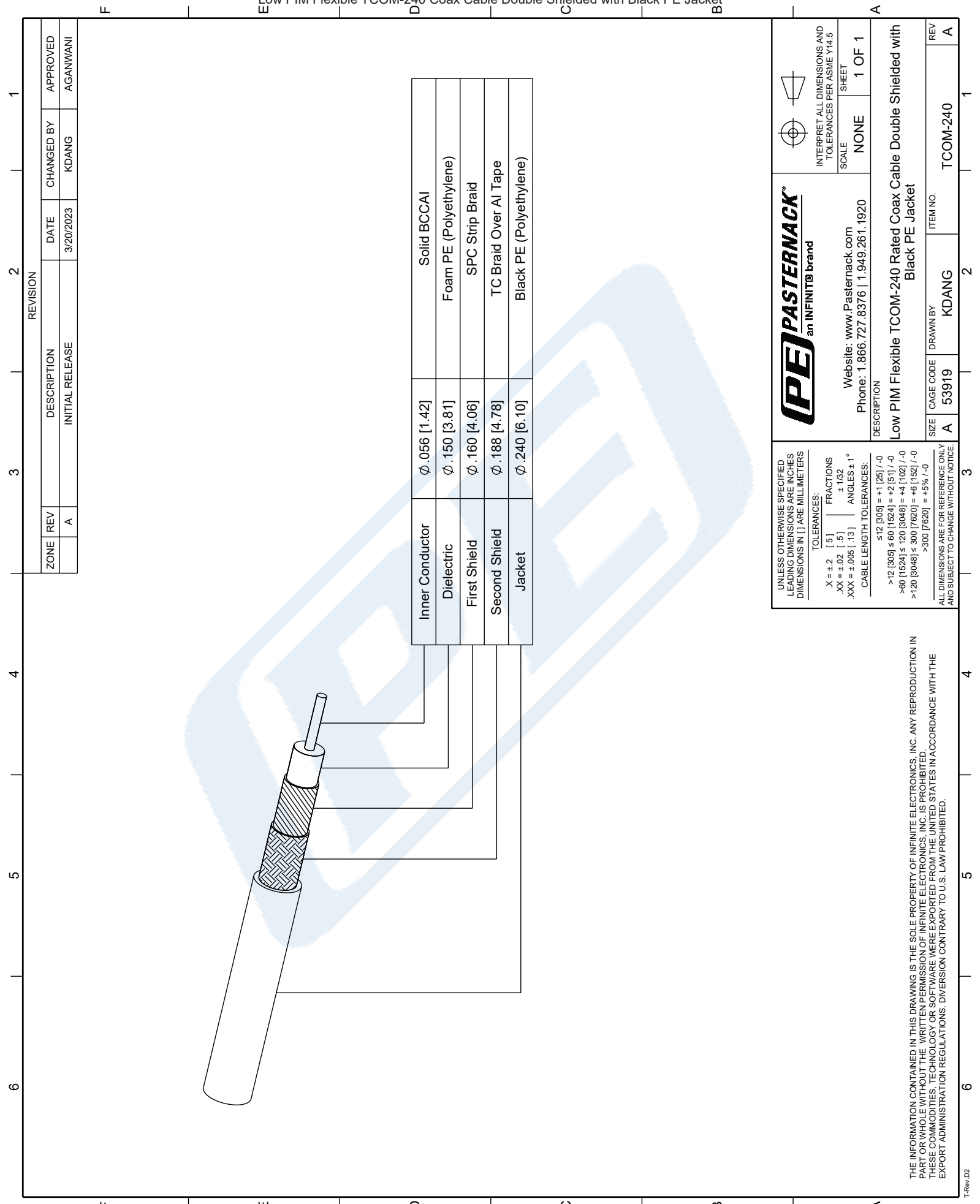
Notes:

Low PIM Flexible TCOM-240 Coax Cable Double Shielded with Black PE Jacket 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: [Low PIM Flexible TCOM-240 Coax Cable Double Shielded with Black PE Jacket TCOM-240](#)

URL: <https://www.pasternack.com/low-pim-flexible-tcom240-pe-jacket-silver-plated-copper-braid-over-tinned-copper-braid-outer-conductor-double-shielded-tcom-240-p.aspx>

The information contained in 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 reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Pasternack does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Pasternack does not assume any liability arising out of the use of any part or documentation.



Inner Conductor	$\phi$ .056 [1.42]	Solid BCCA1
Dielectric	$\phi$ .150 [3.81]	Foam PE (Polyethylene)
First Shield	$\phi$ .160 [4.06]	SPC Strip Braid
Second Shield	$\phi$ .188 [4.78]	TC Braid Over Al Tape
Jacket	$\phi$ .240 [6.10]	Black PE (Polyethylene)

ZONE	REV	DESCRIPTION	DATE	CHANGED BY	APPROVED
	A	INITIAL RELEASE	3/20/2023	KDANG	AGANWANI

1 2 3 4 5 6

F E D C B A

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

TOLERANCES:  
 .X = ±.2 [ .5 ] FRACTIONS  
 .XX = ±.02 [ .5 ] ± 1/32  
 .XXX = ±.005 [ .13 ] ANGLES ± 1°

CABLE LENGTH TOLERANCES:  
 ≤12 [305] = +1 [25] / -0  
 >12 [305] ≤ 60 [1524] = +2 [51] / -0  
 >60 [1524] ≤ 120 [3048] = +4 [102] / -0  
 >120 [3048] ≤ 300 [7620] = +6 [152] / -0  
 >300 [7620] = +5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE

**(PE) PASTERNAK®**  
 an INFINITI® brand

Website: [www.Pasternack.com](http://www.Pasternack.com)  
 Phone: 1.866.727.8376 | 1.949.261.1920

DESCRIPTION  
 Low PIM Flexible TCOM-240 Rated Coax Cable Double Shielded with Black PE Jacket

SCALE NONE SHEET 1 OF 1

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5

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. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

SIZE	CABLE CODE	DRAWN BY	ITEM NO.	REV
A	53919	KDANG	TCOM-240	A