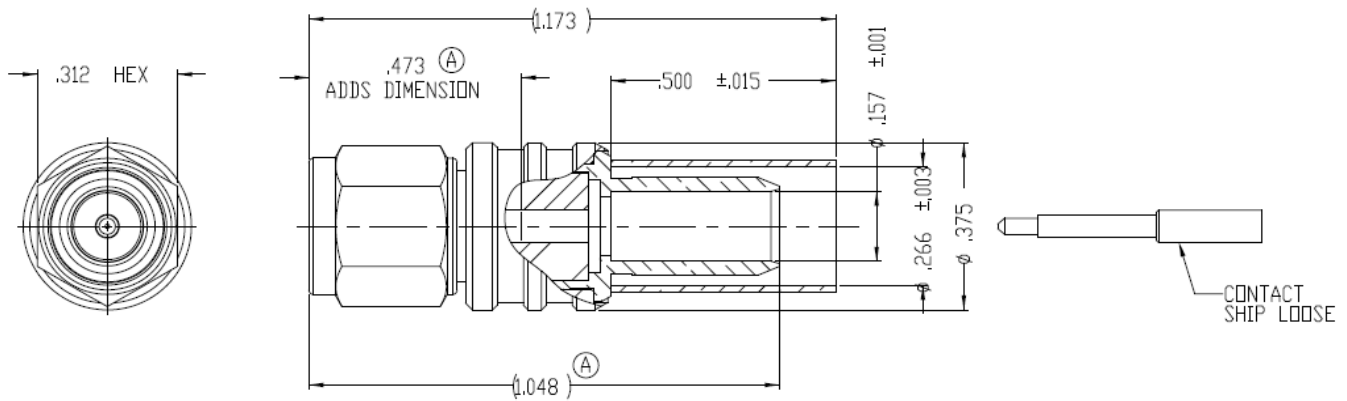


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| SYM | REVISION DESCRIPTION | DFTM | DATE | APPD | DATE |
|-----|-------------------------|-------|--------|--------|---------|
| A | RELEASED FOR PRODUCTION | N.N.N | 9/4/13 | J.D.B. | 9/10/13 |



NOTES:

1. ASSEMBLED CONNECTOR INTERFACE IS DESIGNED IN ACCORDANCE WITH MIL-STD-348

2. 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

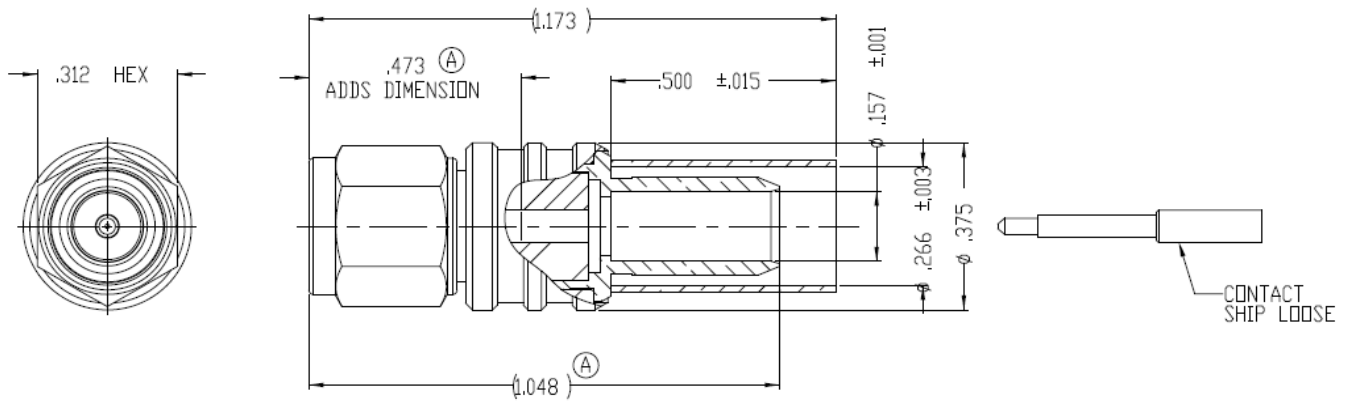
3. FINISH:

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 | | | |
| | | | | DATE 9/4/13 | | | | | |
| USED ON: A | | 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 | | CHKD. J. D. B. | | TC-240-SM-SS-X CONNECTOR ASSEMBLY SMAM for LMR-240 | | | |
| | | | | DATE 9/10/13 | | | | | |
| | | | | APPD. J. D. B. | | | | | |
| | | | | DATE 9/10/13 | | | | | |
| SCALE: NONE | | DWG. SIZE A | DO NOT SCALE DRAWING | CODE IDENT 68999 | SHT 1 of 1 | SD3190-2898 | REV A | | |

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



NOTES:

1. ASSEMBLED CONNECTOR INTERFACE IS DESIGNED IN ACCORDANCE WITH MIL-STD-348

2. MATERIAL:

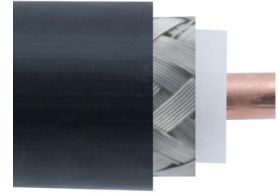
CLAMP & CONTACT - BRASS PER ASTM B16, C36000 ALLOY, TEMPER H02
 BODY, CNUT - STAINLESS STEEL PER ASTM 582, S30300 ALLOY, COND. A
 INSULATOR - TEFLON PER ASTM D1710, TYPE 1, GRADE 1, CLASS A
 GASKET - SILICONE RUBBER PER A-A-59588, 50-75 DUROMETER
 SHRINK SLEEVE - HEAT SHRINKABLE ATUM PER MIL-I-23053/4 (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

3. 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 | | | | CHKD. J. D. B. | | TC-240-SM-SS-X CONNECTOR ASSEMBLY SMAM for LMR-240 | | | |
| | | | | DATE 9/10/13 | | | | | |
| | | | | APPD. J. D. B. | | | | | |
| SCALE: NONE | DWG. SIZE A | DO NOT SCALE DRAWING | CODE IDENT 68999 | DATE 9/10/13 | SHEET 1 of 1 | SD3190-2898 | REV A | | |

TCOM-240-FR Low PIM Flexible Coax Cable Black FRPE Jacket Fire Rated



TCOM-240-FR

Configuration

- Low PIM, Fire Rated Flexible Cable
- 3 Shield(s)

Features

- Lightweight and Extremely Flexible
- PIM < -155 dBc
- RF Shielding >100 dB
- Low Loss Dielectric 84% VoP
- Fire Rated Jacket
- Non-Halogen (Non-Toxic)

Applications

- Wireless Base Station Interconnect
- Distributed Antenna Systems (DAS)
- Antenna Jumpers
- UL/NEC & CSA rating of 'CMR' and 'FT4'
- Low Smoke Requirements
- Small Cell
- Indoor-Riser CMR

Description

TCOM-240 low PIM coax cable from Fairview Microwave is only one of many radio frequency coaxial cable types specifically stocked to be ready for same business day shipment. Fairview Microwave's TCOM-240-FR coax cable is manufactured in a flexible design and has a 50 Ohm impedance. This flexible 50 Ohm coax cable is constructed with a polyethylene jacket of 0.240 inch diameter. The maximum passive intermodulation of this low PIM cable is -155 dBc.

Fairview Microwave's TCOM-240-FR flexible coax cable with a polyethylene jacket is rated for a 18 GHz maximum operating frequency. This 50 Ohm flexible coax cable is built with a shield count of 3. Our low PIM RF coaxial cable has a solid conductor made of copper. The black-colored coax RF cable has a typical insertion loss/attenuation of 3, 5.3, 7.5, 12, 19, 28, and 40 dB/100ft at frequencies of 150 MHz, 450 MHz, 900 MHz, 2000 MHz, 5000 MHz, 10000 MHz and 18000 MHz respectively.

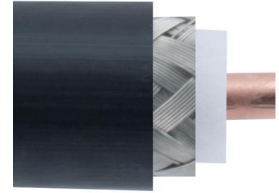
The TCOM-240 coax cable with foam polyethylene dielectric can operate at temperatures ranging from -40 to +85 deg C. Additional specifications for this TCOM-240-FR RF coaxial cable are on our downloadable PDF datasheet above. Our low PIM coaxial cable has a dielectric withstanding voltage of 1500 Vdc. This low PIM RF cable has a one time minimum bend radius of 0.75 inches and a repeat minimum bend radius of 2.5 inches. Our flexible 50 Ohm coax cable has a peak power rating of 5600 watts.

TCOM-240 low PIM RF cable is part of more than one million RF, microwave, and millimeter wave parts in stock at Fairview Microwave. This TCOM-240 coax cable is ready to buy and can be shipped worldwide. Fairview Microwave also maintains a wide selection of other radio frequency and coaxial cable types that ship the same business day from our warehouse in the United States, as with the rest of our other RF/microwave and millimeter wave components.

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|-------------------------|---------|-------------|---------|--------------|
| Frequency Range | DC | | 18 | GHz |
| Impedance | | 50 | | Ohms |
| Velocity of Propagation | | 84 | | % |
| Time Delay | | 1.21 [3.97] | | ns/ft [ns/m] |
| Shielding Effectiveness | 100 | | | dB |

TCOM-240-FR Low PIM Flexible Coax Cable Black FRPE Jacket Fire Rated



TCOM-240-FR

Electrical Specifications

| Description | Minimum | Typical | Maximum | Units |
|--------------------------------------|---------|-------------|---------|--------------|
| 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 |

Performance by Frequency Band

| Description | F1 | F2 | F3 | F4 | F5 | Units |
|------------------|------|-------|-------|-------|-------|----------|
| Frequency | 0.15 | 0.45 | 0.9 | 2 | 5 | GHz |
| Attenuation, Typ | 3 | 5.3 | 7.5 | 12 | 19 | dB/100ft |
| | 9.84 | 17.39 | 24.61 | 39.37 | 62.34 | dB/100m |

| Description | F6 | F7 | F8 | F9 | F10 | Units |
|------------------|-------|--------|----|----|-----|----------|
| Frequency | 10 | 18 | | | | GHz |
| Attenuation, Typ | 28 | 40 | | | | dB/100ft |
| | 91.86 | 131.23 | | | | dB/100m |

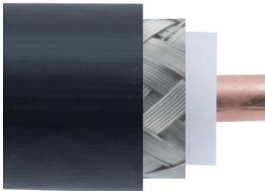
Mechanical Specifications

| | |
|---------------------------------|--------------------------|
| Diameter | 0.24 in [6.1 mm] |
| Weight | 0.045 lbs/ft [0.07 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] |
| Second Shield | Tinned Copper Braid | 0.188 in [4.78 mm] |

TCOM-240-FR Low PIM Flexible Coax
Cable Black FRPE Jacket Fire Rated



TCOM-240-FR

Construction Specifications

| Description | Material and Plating | Diameter |
|-------------|----------------------|------------------|
| Jacket | FRPE, 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:

TCOM-240-FR Low PIM Flexible Coax Cable Black FRPE Jacket Fire Rated from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [TCOM-240-FR Low PIM Flexible Coax Cable Black FRPE Jacket Fire Rated TCOM-240-FR](#)

URL: <https://www.fairviewmicrowave.com/tcom240fr-low-pim-flexible-coax-cable-frpe-jacket-tcom-240-fr-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 impliment improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume liability arising out of the use of any part or document.

TCOM-240-FR CAD Drawing

TCOM-240-FR Low PIM Flexible Coax Cable Black FRPE Jacket Fire Rated

