

4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF Cable

Times Microwave Systems Connector Specification

4.1/9.5 Mini DIN male connector with solder/solder attachment for TFT-402 and TFT-402-LF, part number TC-402-4195M-LP, from Fairview Microwave is in-stock and ships same day. This 4.1/9.5 Mini DIN male connector operates up to a maximum frequency of 3 GHz and offers excellent VSWR of 1.15:1. The 4.1/9.5 Mini DIN male connector also has low passive intermodulation (PIM) of -160 dBc. Our TC-402-4195M-LP connector has an IP67 rating to protect against dust and temporary moisture protection under immersion conditions.

Fairview's 4.1/9.5 Mini DIN male connector TC-402-4195M-LP datasheet specifications and outline drawing are shown in this PDF below. Our extensive offering of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. From providing an I/O for a board design to creating a custom cable assembly configuration, Fairview Microwave has a connector solution to meet your needs. Fairview Microwave also has the expertise to build your custom cable assemblies for you and ship them same-day.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		3	GHz
VSWR			1.15:1	
Insertion Loss			0.1	dB
Passive Intermodulation			-160	dBc
Operating Voltage (DC)			2,000	Vdc
Inner Cond. DC Resistance			1	mOhms
Outer Cond. DC Resistance			0.5	mOhms
Insulation Resistance	5,000			MOhms

Electrical Specification Notes:
Insertion Loss is $0.1 * \sqrt{f(\text{GHz})}$

Mechanical Specifications

Size	
Length	0.964 in [24.49 mm]
Width/Dia.	0.866 in [22.00 mm]
Mating Torque	106 in-lbs [11.98 Nm]

Material Specifications

Description	Material	Plating
Contact	Brass	Silver 5 µm
Insulation	PTFE	
Body	Brass	Tri-Metal 2 µm



Configuration:

- 4.1/9.5 Mini DIN Male Connector
- 50 Ohms
- Straight Body Geometry
- TFT-402, TFT-402-LF Interface Type
- Solder/Solder Attachment
- Low PIM Design

Features:

- Operating Frequency of 3 GHz Max.
- Excellent VSWR of 1.15:1
- PIM levels better than -160 dBc
- Silver Plated Brass Contact
- 5 µm contact plating
- IP 67 Rated

Applications:

- General Purpose Test
- Wireless Communications
- Custom Cable Assemblies
- Low PIM Applications
- Distributed Antenna Systems (DAS)

Fairview Microwave
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Coupling Nut	Brass	Nickel 5 µm
Gasket	Silicone Rubber	

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C
Ingress Protection (IP) Rating	IP 67 Rated
Shock	IEC 60068 -2-27
Vibration	IEC 60068 -2-6-Fc
Thermal Shock	IEC 60068 -2-14-Na

Environmental Specification Notes:

Weather Standard: IEC 60068 40/085/21

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

Plotted and Other Data

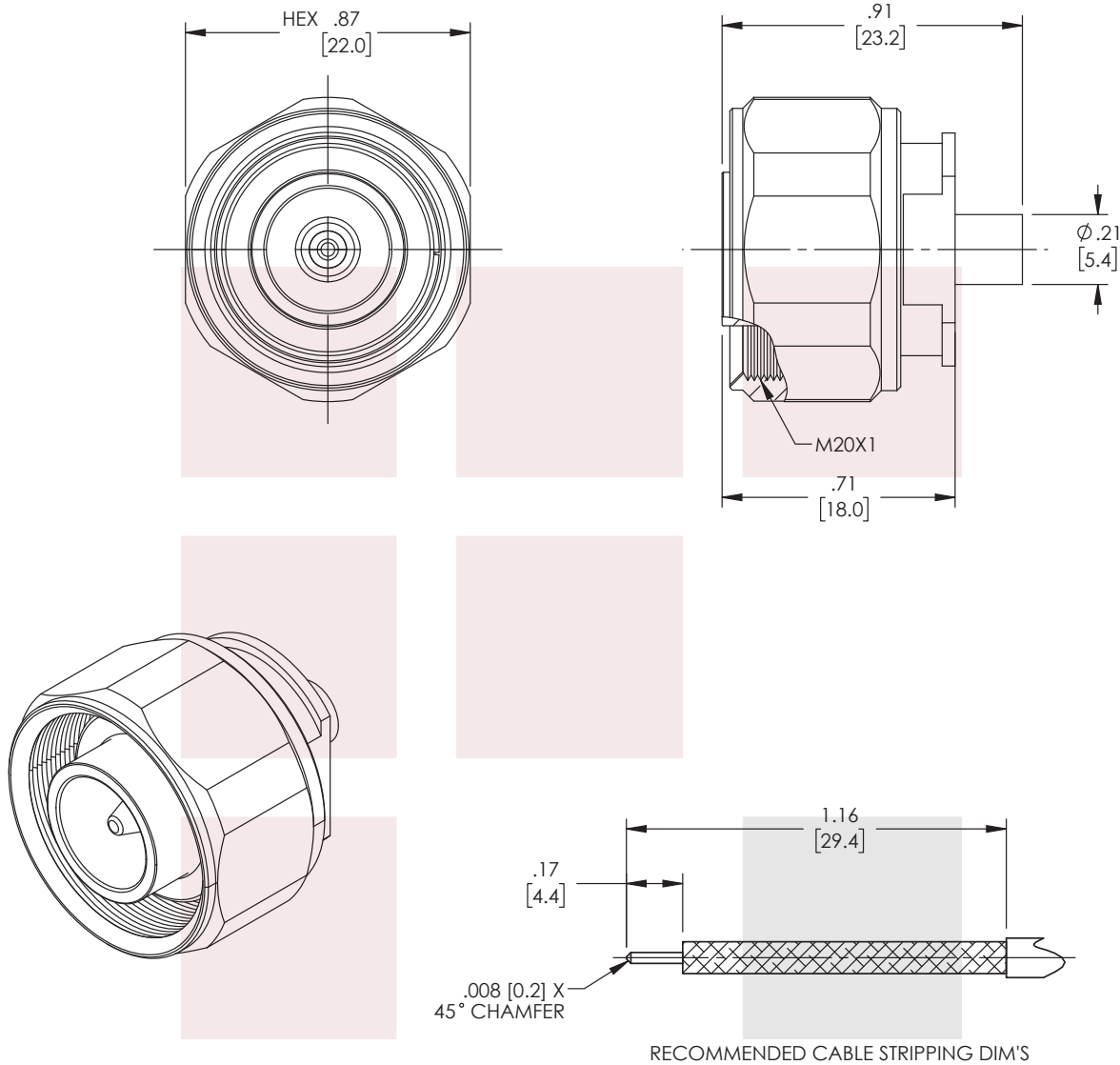
Notes:

4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF Cable 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: [4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF Cable TC-402-4195M-LP](#)

URL: <https://www.fairviewmicrowave.com/4.1-9.5-mini-din-male-tft-402-connector-tc-402-4195m-lp-p.aspx>

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TITLE

4.1/9.5 Mini DIN Male Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF Cable

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

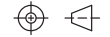
TOLERANCES:

.X = ±.2 [5.08] FRACTIONS
.XX = ±.02 [.51] ± 1/32
XXX = ±.005 [.13] ANGLES ± 1°

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 = +5%L / -0

THIRD-ANGLE PROJECTION



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SHEET 1 OF 1

SCALE 2:1

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

SIZE A	CAGE CODE 3FKR5	DRAWN BY DMAY	ITEM NO. TC-402-4195M-LP	REV A
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T-Rev.D

2.2-5 Female Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF Cable

Times Microwave Systems Connector Specification

2.2-5 female connector with solder/solder attachment for TFT-402 and TFT-402-LF, part number TC-402-225F-LP, from Fairview Microwave is in-stock and ships same day. This 2.2-5 female connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1. The 2.2-5 female connector also has low passive intermodulation (PIM) of -160 dBc.

Fairview's 2.2-5 female connector TC-402-225F-LP datasheet specifications and outline drawing are shown in this PDF below. Our extensive offering of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. From providing an I/O for a board design to creating a custom cable assembly configuration, Fairview Microwave has a connector solution to meet your needs. Fairview Microwave also has the expertise to build your custom cable assemblies for you and ship them same-day.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		6	GHz
VSWR			1.3:1	
Insertion Loss			0.24	dB
Passive Intermodulation			-160	dBc
Operating Voltage (DC)			1,500	Vdc
Insulation Resistance	5,000			MOhms

Electrical Specification Notes:
Insertion Loss is $0.1 \times \sqrt{f(\text{GHz})}$

Mechanical Specifications

Size	
Length	1.1 in [27.94 mm]
Width/Dia.	0.665 in [16.89 mm]
Mating Cycles	100 Cycles
Mating Torque	26 in-lbs [2.94 Nm]

Material Specifications

Description	Material	Plating
Contact	Beryllium Copper	Silver 200 µin
Insulation	PTFE	
Outer Conductor	Beryllium Copper	Silver 100 µin
Body	Brass	Silver 100 µin



Configuration:

- 2.2-5 Female Connector
- 50 Ohms
- Straight Body Geometry
- TFT-402, TFT-402-LF Interface Type
- Solder/Solder Attachment
- Low PIM Design

Features:

- Operating Frequency of 6 GHz Max.
- Good VSWR of 1.3:1
- PIM levels better than -160 dBc
- Silver Plated Beryllium Copper Contact
- 200 µin contact plating

Applications:

- General Purpose Test
- Wireless Communications
- Custom Cable Assemblies
- Low PIM Applications
- Distributed Antenna Systems (DAS)

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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. B
Thermal Shock	MIL-STD 202G, Meth. 107, Cond. B

Environmental Specification Notes:

Climatic Class: IEC 60068 55/155/56

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

Plotted and Other Data

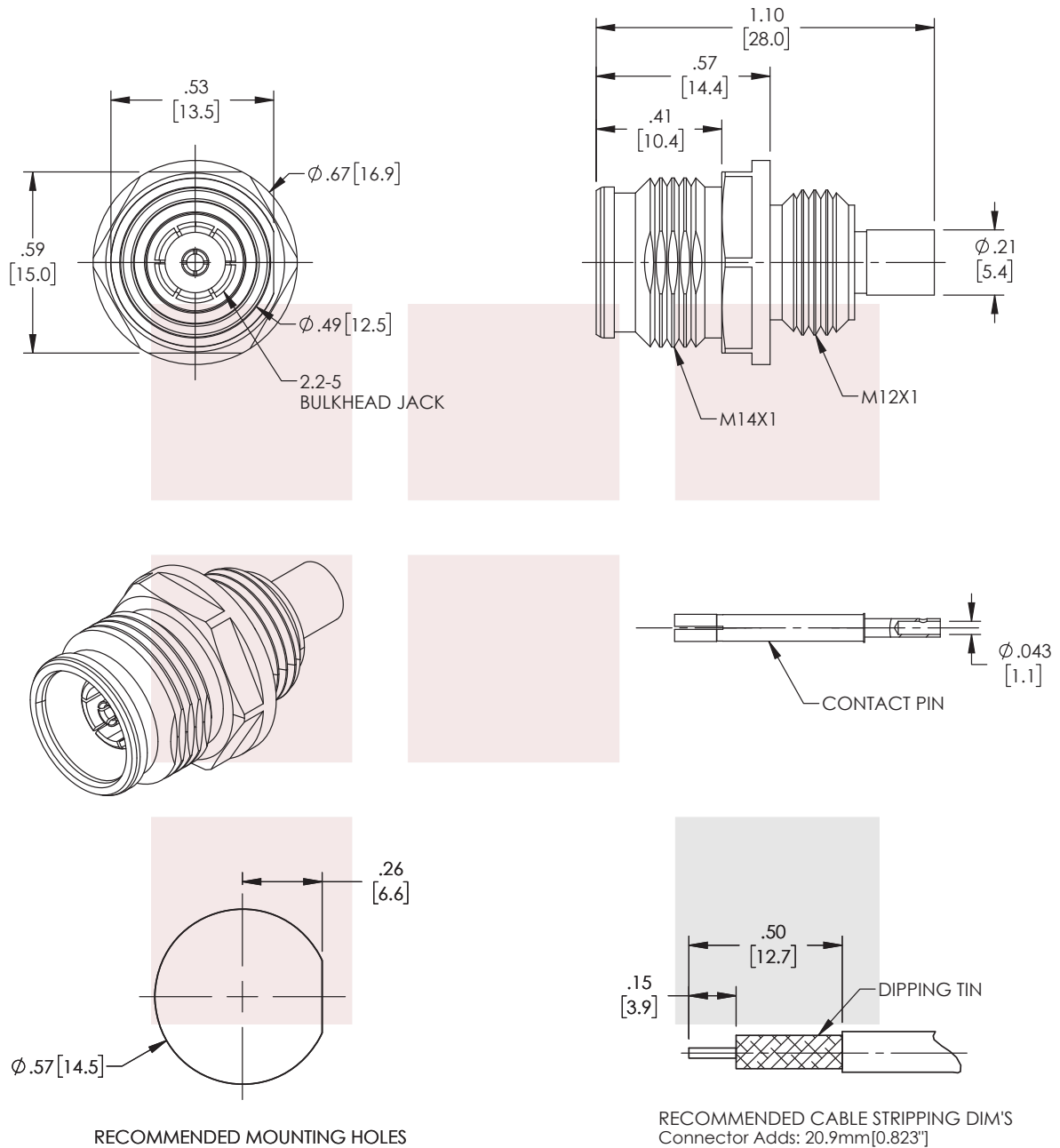
Notes:

2.2-5 Female Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF Cable 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: [2.2-5 Female Low PIM Connector Solder Attachment for TFT-402, TFT-402-LF Cable TC-402-225F-LP](#)

URL: <https://www.fairviewmicrowave.com/2.2-5-female-tft-402-connector-tc-402-225f-lp-p.aspx>

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TITLE

2.2-5 Female Low PIM Connector Solder Attachment
for TFT-402, TFT-402-LF Cable

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

TOLERANCES:

.X = $\pm .2$ [5.08] FRACTIONS
.XX = $\pm .02$ [51] $\pm 1/32$
XXX = $\pm .005$ [13] ANGLES $\pm 1^\circ$

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 = $\pm 5\%$ L / -0

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SCALE 2:1

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SIZE A	CAGE CODE 3FKR5	DRAWN BY DMAY	ITEM NO. TC-402-225F-LP	REV A
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T-Rev.D

TFT-5G-402 Low PIM Flexible Coax Cable Blue FEP Jacket

Times Microwave Systems Coax Cable Specification

TFT-5G-402 low pim plenum rated coax cable by Times Microwave is in-stock and ships same day. The TFT-5G-402 coaxial cable features a taped PTFE dielectric, solid copper center conductor and a dual-layer outer conductor for enhanced shielding performance. The tough jacket, made from an FEP fluoropolymer, provides chemical resistance, moisture resistance and UV protection. These features combine to make the Times Microwave TFT-5G-402 an extremely flexible, low PIM coax cable, ideally suited for Small Cells, Distributed Antenna Systems (DAS) or plenum installations.

A datasheet and specifications for Times Microwave TFT-5G-402 coax cable, supplied by Fairview Microwave, are shown in this PDF below. Our extensive offering of RF, microwave and millimeter wave components allows designers to configure and customize their signal connections however they like. For providing low PIM jumper connections, low PIM feeder cables or connecting Small Cells, Fairview Microwave has the right cables for the job.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	DC		5.8	GHz
Impedance		50		Ohms
Velocity of Propagation		76		%
Shielding Effectiveness	80			dB
Passive Intermodulation			-160	dBc
Nominal Capacitance		26.7 [87.6]		pF/ft [pF/m]

Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	0.45	1.9	2.3	4.9	5.8	GHz
Attenuation, Typ	7.9 25.92	16.4 53.81	18.2 59.71	27 88.58	29.5 96.78	dB/100ft dB/100m
Power In (CW), Max	430	200	180	120	110	Watts

Mechanical Specifications

Diameter	0.16 in [4.06 mm]
Weight	0.028 lbs/ft [0.04 kg/m]
Min. Bend Radius (Installation)	0.75 in [19.05 mm]

Construction Specifications

Description	Material and Plating	Diameter
Inner Conductor	Copper, 1 Strands	0.037 in [0.94 mm]
Conductor Type	Solid	



Configuration:

- Low PIM Flexible Cable
- 2 Shield(s)

Features:

- UL910 Plenum Rated Cable
- PIM < -160 dBc
- Good Shielding >80 dB
- Lightweight and Extremely Flexible
- Low Loss
- UV Resistant Jacket

Applications:

- Small Cells
- Antenna Pigtails
- Plenum Installations
- Base Stations
- Multi-Carrier Communication Systems

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sales@fairviewmicrowave.com

Dielectric	PTFE	0.113 in [2.87 mm]
First Shield	Tin	0.121 in [3.07 mm]
Outer Conductor	Copper, Tin	0.16 in [4.06 mm]
Jacket	FEP, Blue	0.16 in [4.06 mm]

Environmental Specifications

Temperature

Operating Range -55 to +150 deg C

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

Plotted and Other Data

Notes:

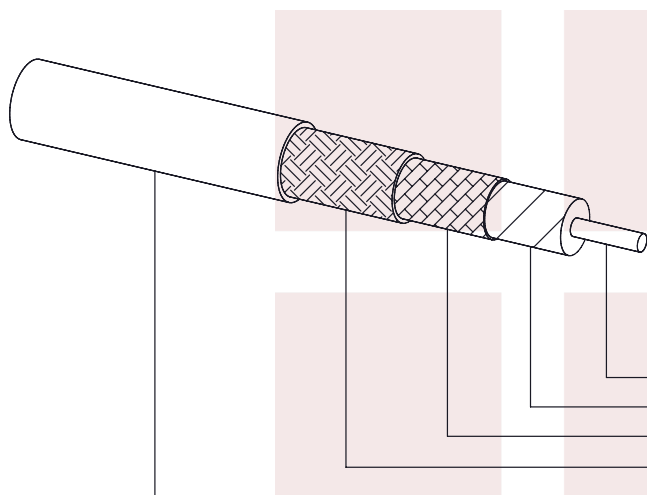
TFT-5G-402 Low PIM Flexible Coax Cable Blue FEP Jacket from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: [TFT-5G-402 Low PIM Flexible Coax Cable Blue FEP Jacket TFT-5G-402](#)

URL: <https://www.fairviewmicrowave.com/tft-5g-402-low-pim-flexible-coax-cable-fep-jacket-tft-5g-402-p.aspx>

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	09/13/2022	A. GANWAN



Center Conductor	.037 [0.94]	Bare Copper
Dielectric	.113 [2.87]	Taped PTFE
Shield	.121 [3.07]	Tin Plated Flat Braid
Outer Braid	.138 [3.51]	Tin Plated Copper Braid
Jacket	.160 [4.06]	Blue FEP



Fairview Microwave™
an INFINITE® brand

TITLE

TFT-5G-402 Low PIM Flexible Coax Cable Blue FEP Jacket

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DIMENSIONS IN [] ARE MILLIMETERS

TOLERANCES:

CABLE LENGTH (L) TOLERANCES

$.X = \pm .2$ [5.08]	FRACTIONS	$L \leq 12$ [305] = +1 [25] / -0
$.XX = \pm .02$ [.51]	$\pm 1/32$	12 [305] < $L \leq 60$ [1524] = +2 [51] / -0
$.XXX = \pm .005$ [.13]	ANGLES $\pm 1^\circ$	60 [1524] < $L \leq 120$ [3048] = +4 [102] / -0
		120 [3048] < $L \leq 300$ [7620] = +6 [152] / -0
		300 [7620] < $L = +5\%$ / -0

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY

SIZE
A

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ITEM NO.	
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TFT-5G-402

REV	A
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SHEET 1 OF 1

SCALE

N/A