



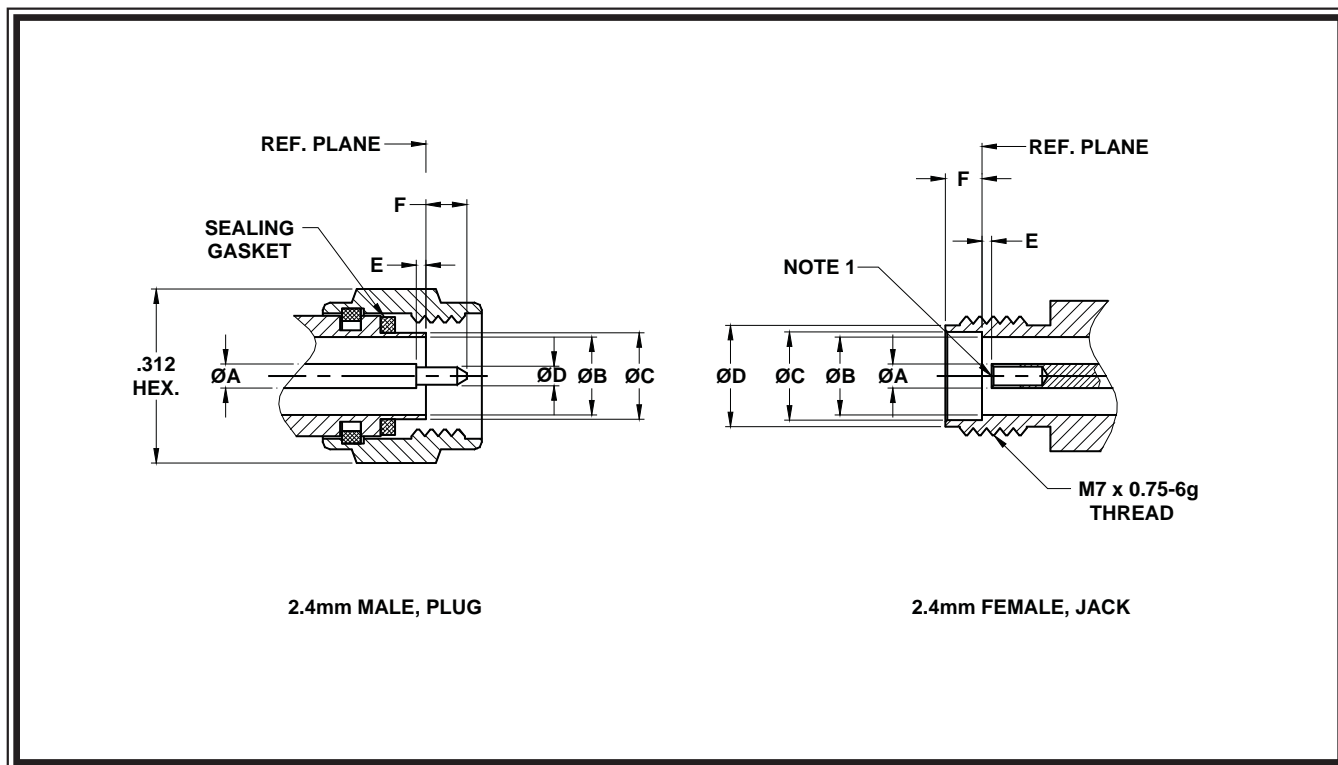
**2.4mm**



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**dynawave**  
INCORPORATED

# 2.4mm • interface dimensions



## male, plug

## female, jack

LTR.	INCHES / MILLIMETERS <sup>3</sup>			
	MINIMUM		MAXIMUM	
	IN.	MM.	IN.	MM.
A	.0405	1.03	.0415	1.05
B	.094	2.39	.095	2.41
C	.1865	4.74	.1875	4.76
D	.0195	0.50	.0205	0.52
E*	.000	0.00	.004	0.10
F	.052	1.32	.058	1.47
G	-----	-----	-----	-----
H	-----	-----	-----	-----
J	-----	-----	-----	-----
K	-----	-----	-----	-----
L	-----	-----	-----	-----

LTR.	INCHES / MILLIMETERS <sup>3</sup>			
	MINIMUM		MAXIMUM	
	IN.	MM.	IN.	MM.
A	.0405	1.03	.0415	1.05
B	.094	2.39	.095	2.41
C	.1880	4.78	.1886	4.79
D	.229	5.82	.232	5.89
E*	.000	0.00	.004	0.10
F	.119	3.02	.121	3.07
G	-----	-----	-----	-----
H	-----	-----	-----	-----
J	-----	-----	-----	-----
K	-----	-----	-----	-----
L	-----	-----	-----	-----

\* Center Contact Gap measured from connector body reference plane .000 inches maximum above (flush) to .004 maximum below.

**Notes:**

1. I.D. to meet VSWR and contact resistance when mated with .0205 / .0195 Dia. inches (0.52 / 0.50) Dia. millimeter pin.
2. When fully engaged, the two reference planes must coincide with metal-to-metal contact.
3. Metric equivalents (to the nearest 0.01mm) are given to general information only and are based on 1.0 millimeter=.03937 inchs.
4. These dimensions are subject to change according to the latest revisions of MIL-C-39012 and MIL-STD-348A.

# 2.4mm specifications

The specifications below are general specifications for all 2.4mm connectors. Specific specifications for VSWR, insertion loss and R.F. leakage for each connector is available from Dynawave upon request. Specifications in the following table are recommended for any procurement documents or drawings

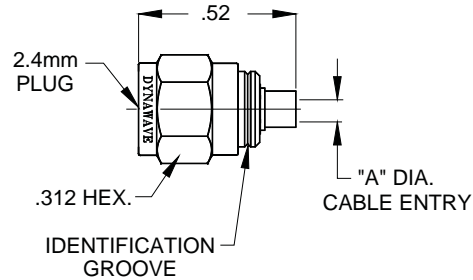
In the event of any conflict between these specifications and General Specification MIL-C-39012 these specifications shall govern. These specifications are subject to change according to the latest revision of IEEE-287.

REQUIREMENT	MIL-C-39012 PARAGRAPH	SPECIFICATIONS
<b>GENERAL</b>		
Material	3.3	Steel corrosion resistant per ASTM- A- 581, Type 303, Cond. A Beryllium copper per ASTM-B196/B, 196M, Copper Alloy TFE Fluorocarbon per ASTM-D-1710, Type 1, Class 1, Grade 1, Class B. Silicone Rubber per ZZ-R-765, CLASS IIB. 50-60 Shore.
Finish	3.3.1	Center contacts shall be gold plated to a minimum thickness of .00005-inch in accordance with ATSM-B-488, Type I, Code C. All other metal parts shall be finished so as to provide a connector which meets the corrosion requirements of this table.
Design	3.4	The design shall be such that the outline dimensions in this catalog are met. In addition the assembled connector shall meet the interface dimensions.
<b>ELECTRICAL</b>		
Insulation Resistance	3.11	The insulation resistance shall not be less than 5,000 megohms
Dielectric Withstanding Voltage	3.17	The magnitude of the test voltage shall be 500 volts rms at sea level
RF High Potential Withstanding Voltage	3.23	The RF high potential withstanding voltage is 350 volts rms at 5 MHz. Leakage is not applicable.
Contact Resistance	3.18	The center contact resistance drop shall not exceed 3.0 milliohms and the outer contact resistance drop shall not exceed 2.0 milliohms.
Voltage Standing Wave Ratio (VSWR)	3.14	See applicable connector specifications.
RF Leakage	3.26	See applicable connector specifications.
Insertion Loss	3.27	See applicable connector specification.
<b>MECHANICAL</b>		
Force to Engage and Disengage pounds.	3.5.1	The torque required to engage and disengage shall not exceed 2 inch- The longitudinal force is not applicable
Coupling Nut Retention Force	3.25	Not applicable for Female connectors. For Male connectors, the retension force is and Proof Torque. 60 pounds minimum. The Proof torque is 15 inch-pounds mimum.
Cable Retention force	3.24	The force applied shall be 30 pounds minimum. The cable twisting and bending requirements shall not apply.
Mating Characteristics	3.7	See interface dimensions shown on Page 156. Applicable to Females only: oversize pin .0202 minimum diameter .045 deep; Insertion force 1.5 pounds maximum with .0205 minimum diameter pin; withdrawal force 1 ounce minimum with .0192 maximum diameter pin.
Connector Durability	3.15	The connector to be tested and its mating connector shall be subjected to 500 insertions and withdrawal cycles at 12 cycles per minute maximum. The connector shall show no evidence of mechanical failure and connector shall meet the mating characteristic requirements.
<b>ENVIRONMENTAL</b>		
Vibration	3.18	Specification MIL-STD-202, Method 204, Test Condition D.
Shock	3.19	Specification MIL-STD-202, Method 213, Test Condition I.
Thermal Shock	3.20	Specification MIL-STD-202, Method 107, Test Condition B except high temperture shall be + 200°C.
Recommended Mating Torque		2.0 inch-pounds
Corrosion (Salt Spray)	3.13	Specification MIL-STD-202, Method 101, Test Condition B. The salt solution shall be five per cent.
Moisture Resistance	3.21	Specification MIL-STD-202, Method 106. Step 7b (vibration) shall be omitted. Insulation resistance shall be 200 megohms minimum within 5 minutes of removal from humidity.
Corona Level	3.22	The connector shall not exhibit breakdown (corona) when the applied voltage is 150 volts rms and the altitude is 70,000 feet.
Complete specifications on every connector in this catalog are available from Dynawave		

Specifications are subject to change without notice

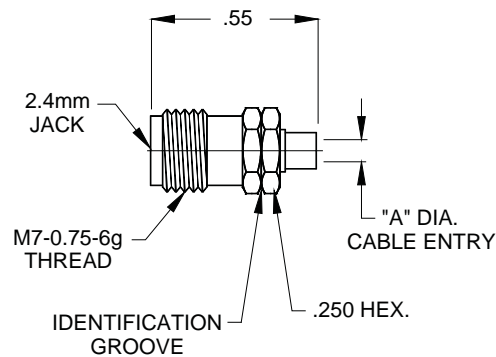
# 2.4mm • semi rigid cable connectors

male, plug, straight



PART NUMBER	"A" DIA.	CABLE TYPE	MATERIAL TYPE	FREQUENCY RANGE
1200-4725-6200	.052 MIN.	.047 SEMI-RIGID	STAINLESS STEEL	DC - 50.0 GHz.
1200-8525-6200	.089 MIN.	RG 405/U (.085)	STAINLESS STEEL	DC - 50.0 GHz.

female, jack, straight

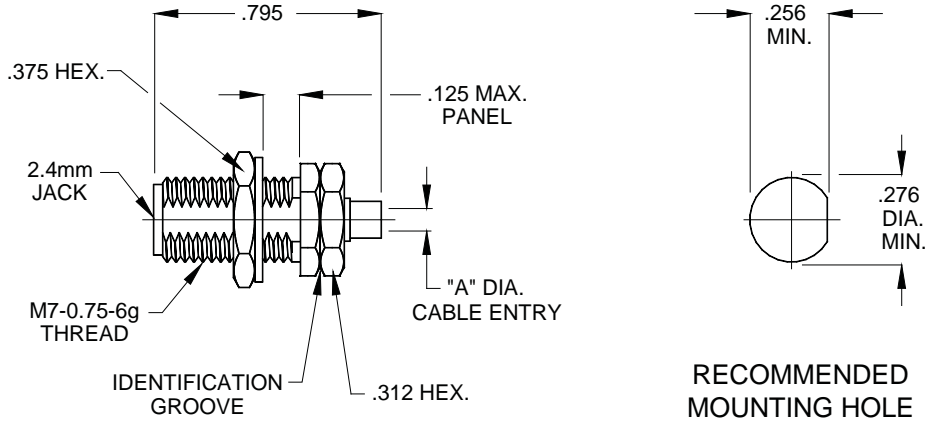


PART NUMBER	"A" DIA.	CABLE TYPE	MATERIAL TYPE	FREQUENCY RANGE
1300-4725-6200	.052 MIN.	.047 SEMI-RIGID	STAINLESS STEEL	DC - 50.0 GHz.
1300-8525-6200	.089 MIN.	RG 405/U (.085)	STAINLESS STEEL	DC - 50.0 GHz.

Specifications are subject to change without notice

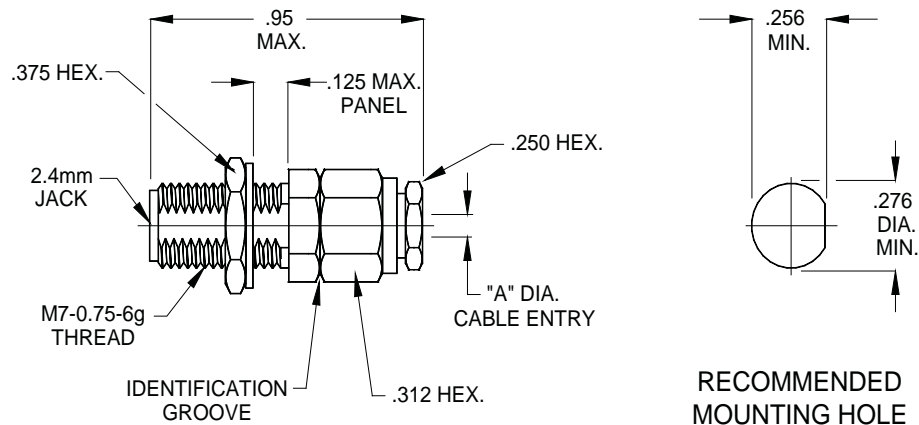
# 2.4mm • semi rigid cable connectors

female, jack, bulkhead mount



PART NUMBER	"A" DIA.	CABLE TYPE	MATERIAL TYPE	FREQUENCY RANGE
1310-4725-6200	.052 MIN.	.047 SEMI-RIGID	STAINLESS STEEL	DC - 50.0 GHz.
1310-8525-6200	.089 MIN.	RG 405/U (.085)	STAINLESS STEEL	DC - 50.0 GHz.

female, jack, solder clamp, bulkhead mount

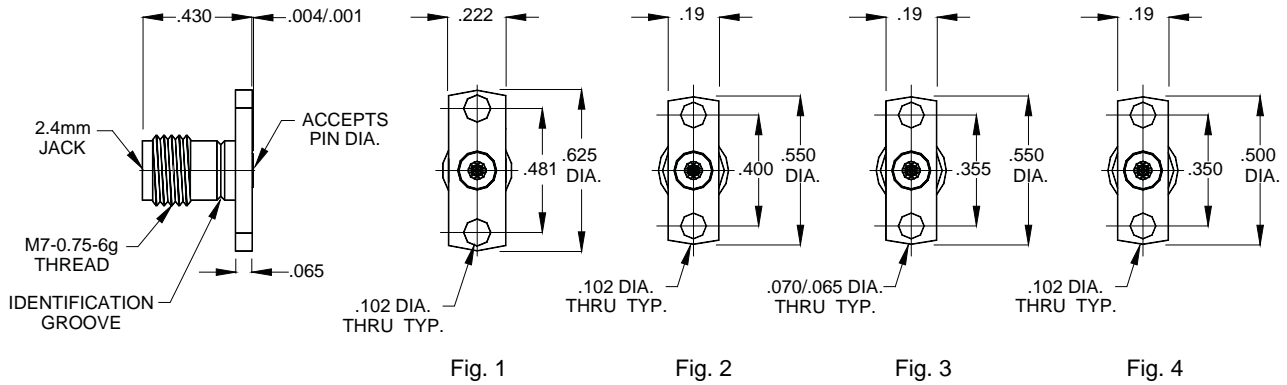


PART NUMBER	"A" DIA.	CABLE TYPE	MATERIAL TYPE	FREQUENCY RANGE
1310-4745-6200	.052 MIN.	.047 SEMI-RIGID	STAINLESS STEEL	DC - 50.0 GHz.
1310-8545-6200	.089 MIN.	RG 405/U (.085)	STAINLESS STEEL	DC - 50.0 GHz.

Specifications are subject to change without notice

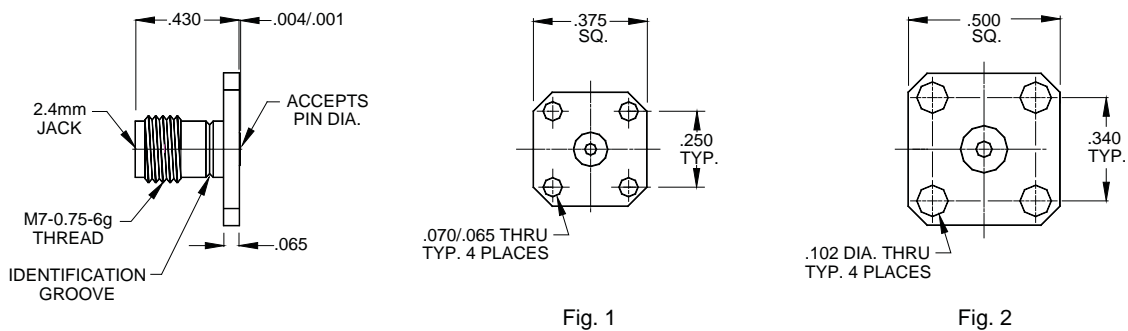
# 2.4mm • field replaceable connectors

female, jack, 2 hole flange mount



PART NUMBER	Fig.	ACCEPTS PIN DIA.	MATERIAL TYPE	FREQUENCY RANGE
1352-0085-6200	1	.013/.011	STAINLESS STEEL	DC - 50.0 GHz.
1352-0085-6204	2	.013/.011	STAINLESS STEEL	DC - 50.0 GHz.
1352-0085-6202	3	.013/.011	STAINLESS STEEL	DC - 50.0 GHz.
1352-0085-6206	4	.013/.017	STAINLESS STEEL	DC - 50.0 GHz.
1352-0085-6209	4	.010/.009	STAINLESS STEEL	DC - 50.0 GHz.

female, jack, 4 hole flange mount

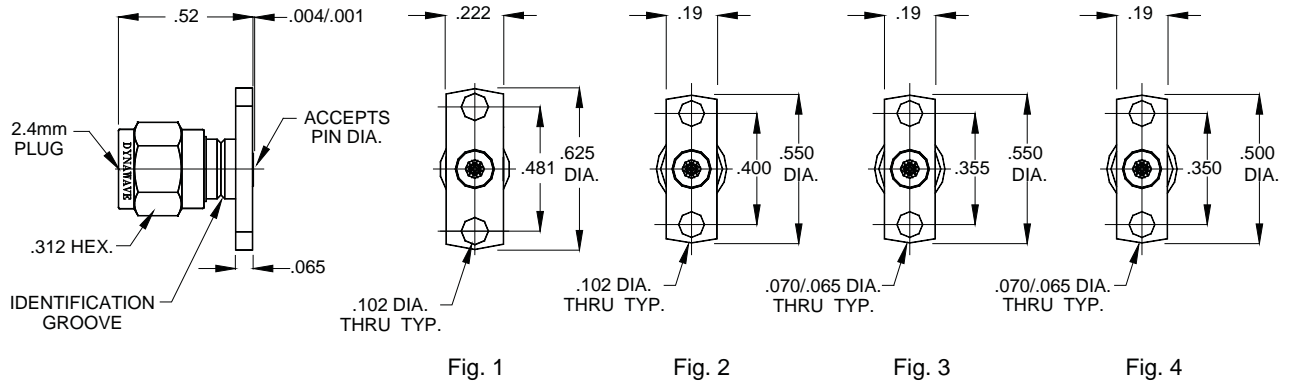


PART NUMBER	Fig.	ACCEPTS PIN DIA.	MATERIAL TYPE	FREQUENCY RANGE
1354-0085-6202	1	.013/.011	STAINLESS STEEL	DC - 50.0 GHz.
1354-0085-6203	2	.013/.011	STAINLESS STEEL	DC - 50.0 GHz..

Specifications are subject to change without notice

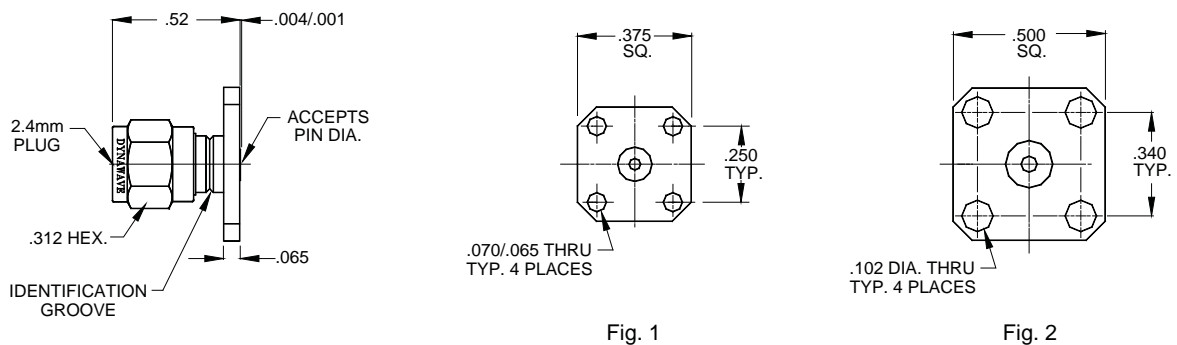
# 2.4mm • field replaceable connectors

male, plug, 2 hole flange mount



PART NUMBER	Fig.	ACCEPTS PIN DIA.	MATERIAL TYPE	FREQUENCY RANGE
1252-0085-6200	1	.013/.011	STAINLESS STEEL	DC - 50.0 GHz.
1252-0085-6201	2	.013/.011	STAINLESS STEEL	DC - 50.0 GHz.
1252-0085-6202	3	.013/.011	STAINLESS STEEL	DC - 50.0 GHz.
1252-0085-6204	4	.013/.017	STAINLESS STEEL	DC - 50.0 GHz.
1252-0085-6209	4	.010/.009	STAINLESS STEEL	DC - 50.0 GHz.

male, plug, 4 hole flange mount

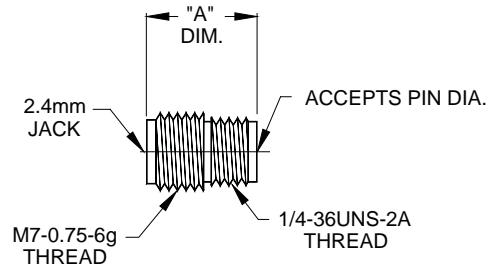


PART NUMBER	Fig.	ACCEPTS PIN DIA.	MATERIAL TYPE	FREQUENCY RANGE
1254-0085-6200	1	.013/.011	STAINLESS STEEL	DC - 50.0 GHz.
1254-0085-6201	2	.013/.011	STAINLESS STEEL	DC - 50.0 GHz..

Specifications are subject to change without notice

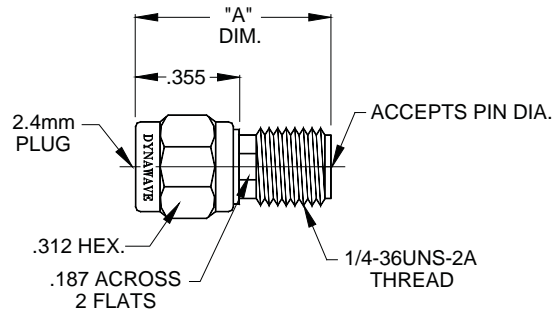
# 2.4mm • field replaceable connectors

female, jack, thread-in



PART NUMBER	ACCEPTS PIN DIA.	"A" DIM.	MATERIAL TYPE	FREQUENCY RANGE
1330-0081-6209	.010/.008	.430	STAINLESS STEEL	DC - 50.0 GHz.
1330-0081-6212	.013/.011	.430	STAINLESS STEEL	DC - 50.0 GHz..

male, plug, thread-in



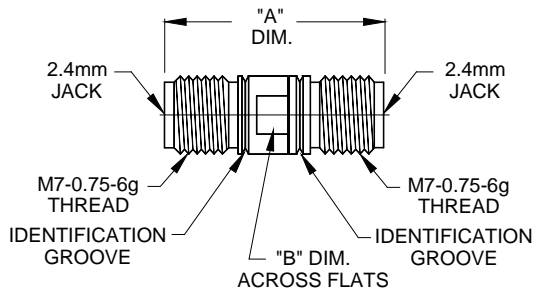
PART NUMBER	ACCEPTS PIN DIA.	"A" DIM.	MATERIAL TYPE	FREQUENCY RANGE
1230-0081-6209	.010/.008	.660	STAINLESS STEEL	DC - 50.0 GHz.
1230-0081-6212	.013/.011	.660	STAINLESS STEEL	DC - 50.0 GHz..

Specifications are subject to change without notice



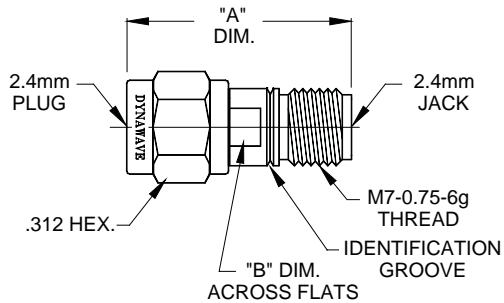
# 2.4mm • in-series adapters

female, jack to female, jack, straight



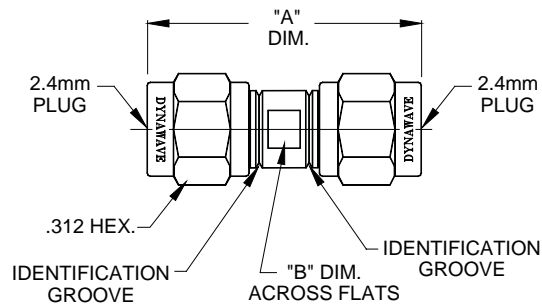
PART NUMBER	"A" DIM.	"B" DIM.	MATERIAL TYPE	FREQUENCY RANGE
1100-1313-6200	.798	.250	STAINLESS STEEL	DC - 50.0 GHz..

male, plug to female, jack, straight



PART NUMBER	"A" DIM.	"B" DIM.	MATERIAL TYPE	FREQUENCY RANGE
1100-1213-6200	.808	.250	STAINLESS STEEL	DC - 50.0 GHz..

male, plug to male, plug, straight

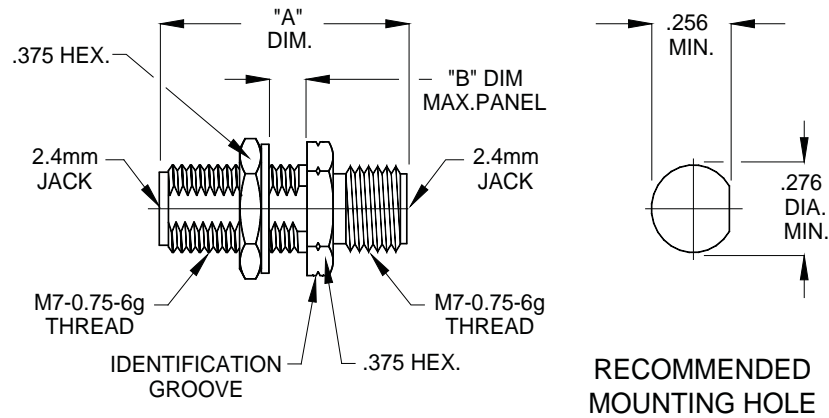


PART NUMBER	"A" DIM.	"B" DIM.	MATERIAL TYPE	FREQUENCY RANGE
1100-1212-6200	.818	.218	STAINLESS STEEL	DC - 50.0 GHz..

Specifications are subject to change without notice

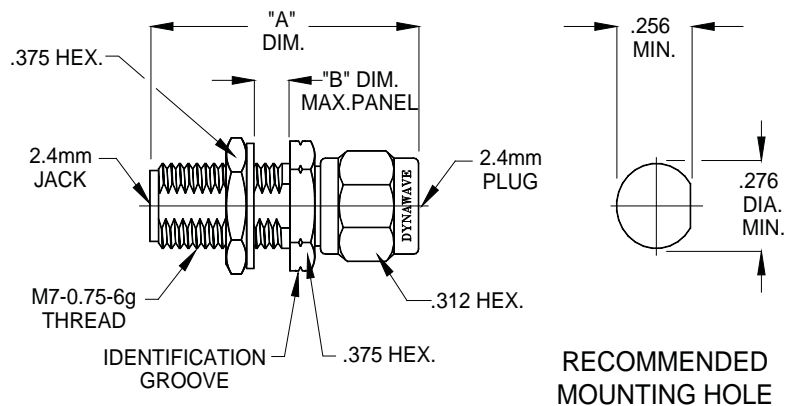
# 2.4mm • in-series adapters

female, jack to female, jack, bulkhead mount



PART NUMBER	"A" DIM.	"B" DIM.	MATERIAL TYPE	FREQUENCY RANGE
1110-1313-6240	.795	.150	STAINLESS STEEL	DC - 50.0 GHz..

male, plug to female, jack, bulkhead mount

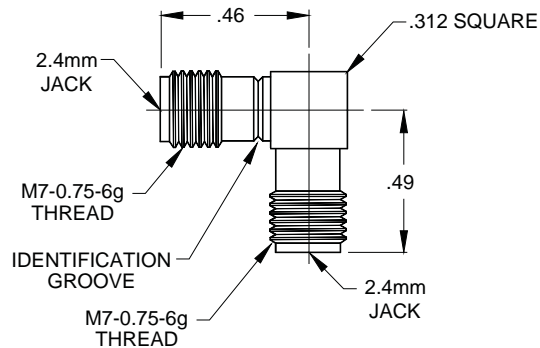


PART NUMBER	"A" DIM.	"B" DIM.	MATERIAL TYPE	FREQUENCY RANGE
1110-1213-6200	.895	.150	STAINLESS STEEL	DC - 50.0 GHz..

Specifications are subject to change without notice

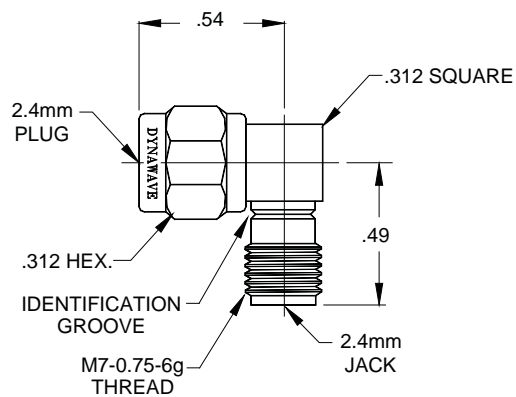
# 2.4mm • in-series right angle adapters

female, jack to female, jack, right angle



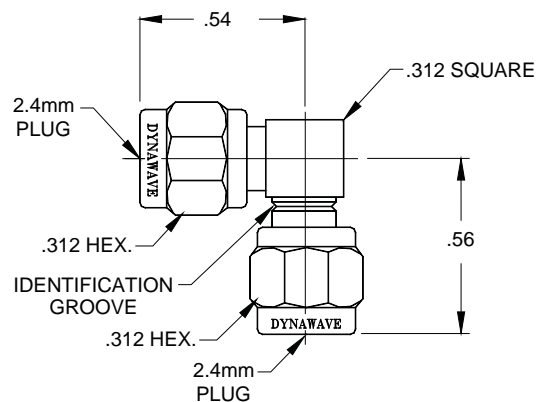
PART NUMBER	MATERIAL TYPE	FREQUENCY RANGE
1101-1313-6200	STAINLESS STEEL	DC - 50.0 GHz..

female, jack to male, plug, right angle



PART NUMBER	MATERIAL TYPE	FREQUENCY RANGE
1101-1213-6200	STAINLESS STEEL	DC - 50.0 GHz..

male, plug to male, plug, right angle



PART NUMBER	MATERIAL TYPE	FREQUENCY RANGE
1101-1212-6200	STAINLESS STEEL	DC - 50.0 GHz..

Specifications are subject to change without notice

# Notes

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