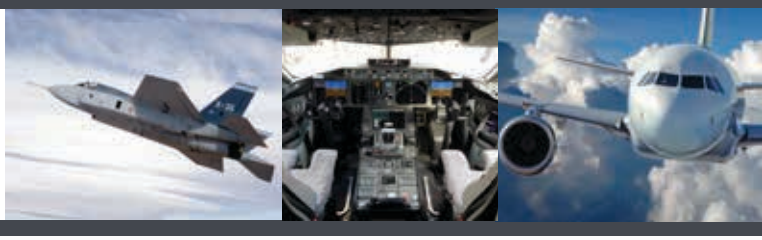
ARINC 600

RACK AND PANEL CONNECTORS



Amphenol CANADA

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For more than 50 years, Amphenol Canada Corp. a subsidiary of Amphenol Corporation has been an international leader in the manufacture of Rectangular I/O and EMI Filtered Connectors.

We design, manufacture and test EMI / EMP filter and non-filter connectors, which are used worldwide in military, aerospace, and commercial applications. As part of Amphenol Corporation, we have the advantage of access to technologies and processes of Amphenol's worldwide facilities. Our expertise in understanding and supporting our customers' interconnect needs has earned us a reputation of excellence among the world's leading users of electronic components.

CUSTOMER SERVICE

At Amphenol Canada, customer service is a solid commitment from all our employees. Our product managers, application engineers, product specialists, and sales representatives are able to answer your questions and assist you in choosing the right connectors for your applications.

Using Amphenol's on-line computer system, we are able to promptly update you on your order status, provide you with price and delivery quotations, and address any problems or questions you might have.

Whether you need standard or custom designed connectors, our marketing department is your liaison with Amphenol Canada's engineering, quality and manufacturing experts.

QUALITY AND RELIABILITY

Certified to ISO 9001:2015+ AS9100D
Amphenol Canada's broad base of customers and the high levels of technology in which they are involved make it essential that Amphenol's own products are of the highest quality and reliability.

Please contact us for RoHS requirements.

ARINC 600

TABLE OF CONTENTS

ARINC 600

INTRODUCTION

ARINC 600 Connectors are a recognized standard rack and panel connector for Aircraft applications. The ARINC 600 is the successor to the ARINC 404 for many of the new avionic designs. Compared to the ARINC 404, the ARINC 600 features lower mating force contacts, increased contact count and a front release, floating keying system.

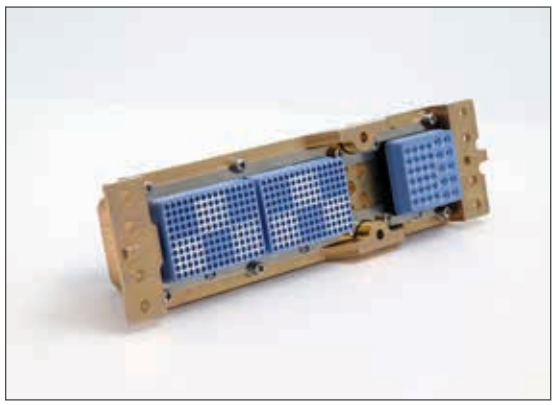
Amphenol's extensive product offering will meet the most demanding needs of our customers. At the design-in stage, Amphenol's sales engineers will work with you to select a connector from our standard product line or coordinate the design of an application specific connector. Amphenol's ARINC 600 rack and panel connectors are designed to meet all relevant ARINC 600 connector specifications.

Amphenol ARINC 600 Connectors offer:

- Low insertion force contacts
- Both environmental and non-environmental versions
- Front removable keying posts
- Field replaceable inserts for size 22 and power contacts
- Up to 800 size 22 contact positions in one connector
- Crimp, coaxial, power, printed circuit, and wire wrap contacts
- Waveguide connections

Amphenol “A” Series Connectors are designed per ARINC 600 specifications and utilize pin and socket contacts manufactured in conformance with MIL-C-39029B.

PERFORMANCE SPECIFICATIONS	
Dielectric withstanding voltage (DWV):	1500 Vrms 500 Vrms @ 50,000 ft. (15,240m)
Contact continuous current ratings:	Size 22 - 5.0A: Size 20 - 7.5A Size 16 - 13.0A; Size 12 - 23.0A
Contact resistance:	
Size 22:	8.0 milliohms, initial (max.) 11.0 milliohms, conditioned (max.)
Size 20:	7.0 milliohms, initial (max.) 8.5 milliohms,conditioned (max.)
Size 16:	3.5 milliohms, initial (max.) 5.0 milliohms, conditioned (max.)
Size 12:	2.0 milliohms, initial (max.) 2.5 milliohms, conditioned (max.)
Insulation resistance:	5.0 gigaohms min. at 500 VDC
Engagement/separation force:	Shell size 1 - 27 lbs. (120N) max. Shell size 2 - 60 lbs. (267N) max. Shell size 3 - 105 lbs. (467N) max.
Durability:	500 cycles min. - mating & unmating
Temperature range:	-65°C (-86° F) to +125°C (+275° F)
Fluid immersion (Class A only) resistance:	(1) Hydraulic fluid per MIL-H-5606 (2) Lubricating oil (synthetic) per MIL-L-23699 (3) 1:3 mix of isopropyl alcohol & mineral spirits per FED. SPECS. TT-I-735 &TT-T-291 respectively
Vibration:	MIL-STD-1344, Method 2005.1, condition value E: random - 16.4G minimum severity: 8 hours in each of 3 mutually perpendicular planes with 100mA electrical load. No visible damage, breakage, cracking or loosening of parts and no discontinuities exceeding 1 microsecond.
Shock:	MIL-STD-1344, Method 2004.1, test condition A: Three shocks in each direction along each of 3 axes, mutually perpendicular to each other. No visible damage, breakage, cracking or loosening of parts and no discontinuities exceeding 1 microsecond.



MATERIALS		
DESCRIPTION	MATERIAL	FINISH*
Shell & Backshell	Aluminum Alloy or Composite	"Electroless Nickel, Chem Film (Mil-C-5541, Class 3), RoHS Chem Film (MIL-DTL-5541, Type II, Class 3) OD Chromate, Tin, Gold, Zinc Nickel, Yellow CAD or Nickel Fluorocarbon Polymer (Durmalon)"
Hardware & Polarizing Keys	Stainless Steel	Passivated or Nickel Plated
Inserts	Thermoset or Thermoplastic	---
	Aluminum Alloy	Nickel Plated
Grommets & Face Seal	Fluorosilicone Elastomer	---
EMI Spring	Copper Alloy	Nickel Plated, Gold
O-Ring	Fluorosilicone Elastomer	---
Contacts	Copper Alloy	Gold over Nickel, Solder Dipping is available in both RoHS and non-RoHS Compliance

* other platings available on request

Next Gen Stamped & Formed Contacts
Introduction

NEXT GEN 600

Introducing Amphenol Canada's ARINC 600 Next Generation Stamped & Formed Contacts Technology. Size 22 Sockets are now available in stamped and formed designs in both PCB and Compliant styles.

The Next Gen ARINC 600 is available to replace your standard inserts and contacts with this intelligent design. This will provide cost savings and 25% reduction in weight

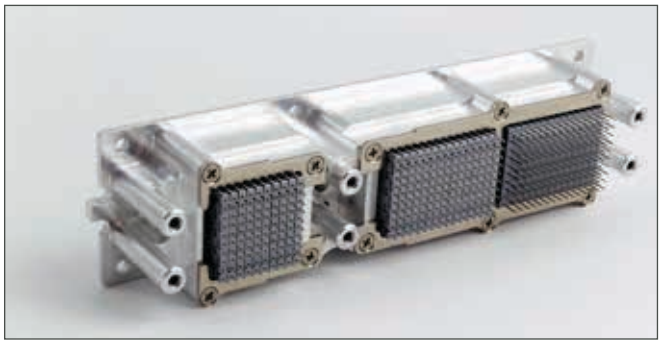
These inserts and contacts are fully tested and in compliance with all ARINC 600 specifications.
The contacts are designed using stamped and formed method with overmolding technology. They are completely inter-changeable and mateable with all existing Size 22 contacts. Contact Amphenol Canada for more information.

PRODUCT FEATURES

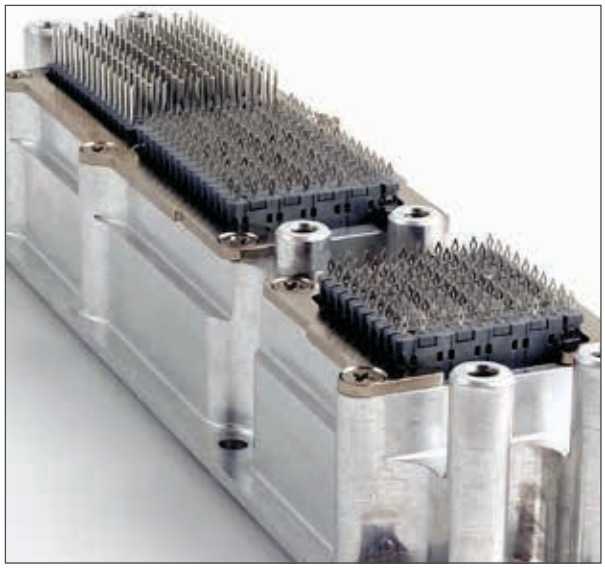
- High-speed
- Compact
- Durable
- Low -cost
- Filtered

CUSTOMIZATION

Consult Amphenool Canada for additoinal information on custom applications.



The Next Generation of high-quality ARINC 600 interconnect



FEATURES

- Intermateable with existing plugs
- 24% weight saving
- Lower cost
- High precision stamped and formed and selectively plated, size 22 contacts
- Available in PC Tail, press-fit compliance tail
- Overmolded wafer inserts to address humidity performance and to eliminate potential solder wicking issues
- Rear removable contacts in rows of 10
- Interchangeable inserts with existing shells
- Equivalent electrical performance of conventional design
- RoHS compliant
- US patent #9,362,638

MECHANICAL

- Shell: Aluminum allo per SAE QQA.
- Shell Plating: Nickel, yellow iridite or chem film
- Contact: High performance copper alloy with 50µ" gold plating in mating area. Tin dipped contacts with optional gold plating available
- Insulator: Thermoplastic overmolded wafers

ENVIRONMENTAL

- Temperature Range: -65° to +125°C
- High Temperature Tolerance: 1000 hrs min. at 125°C
- Process Temperatures: 270°C for 10 sec. wave solder 260°C for 2 min. vapor phase
- Salt Spray: per MIL-STD-1344, method 1001, cond. B
- Humidity: per MIL-STD-1344, method 1002.1, type II

ELECTRICAL

- Dielectric Withstand Voltage: Sea Level-1500 Vrms, 15,000 m: 500 Vrms
- Voltage Rating: 500 Vrms max.;125 Vrms at 15,000 m
- Insulation Resistance: 5.0 GW min. at 500 Vdc
- Size 22 Contact Current Rating: 5.0 Adc, continuous
- Contact Resistance: per MIL-STD-1344, method 3004-1

APPLICATIONS

Commercial

- Navigation/Radar
- Engine Controls
- Airframe & Landing Gear
- In-Flight Entertainment (IFE)

Military

- Tactical/Mission Systems
- Power Distribution & Control
- Weapons Systems
- Avionics Mission Systems
- Radar
- Engine Controls
- Airframe & Landing Gear
- Weapons Systems

How to Order - Next Gen

Board Mount Receptacle's- For standard see page 9

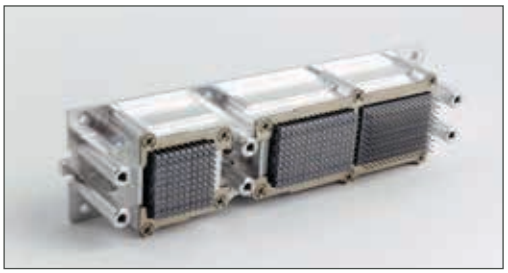
NEXT GEN 600

PART NUMBER KEY

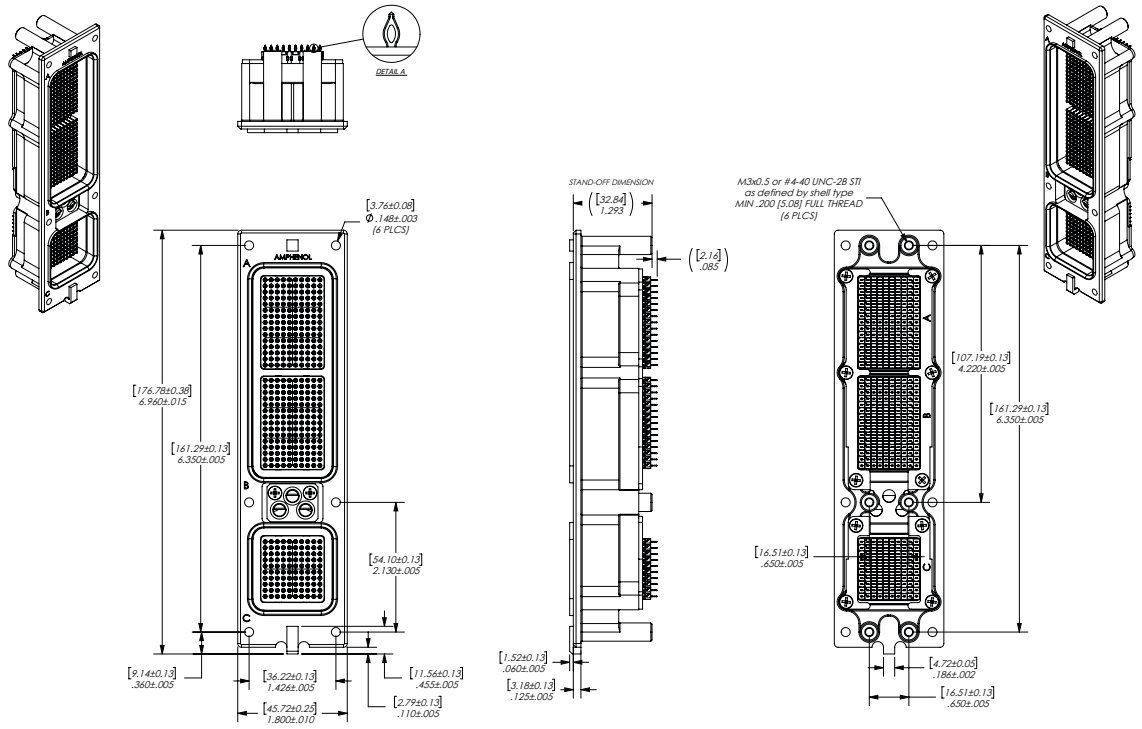
1. Connector Series	2.Class	3. Shell Style	4. Insert Layout Designator PG 15-21	5. Shell Type	6. Connector Mounting Modifier PG 22-24	7. Polarizing Position PG 25-27	8. Contact Modifier Material
A	L	3-	313-	4	00	01	NGX

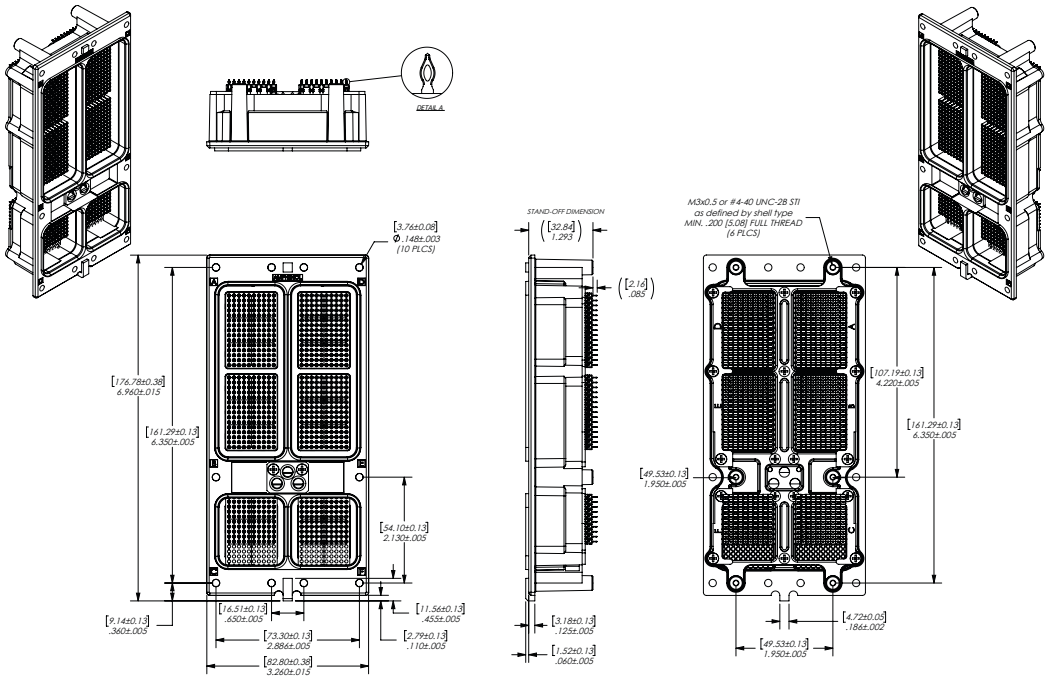
STEPS	PART #	DESCRIPTION
1. CONNECTOR SERIES	**A**	ARINC 600
2. CLASS	**L**	PC Tail
	M	PC Tail & Rear Removable Crimp Contacts (Typically RF or power)
3. SHELL SIZE	**1-**	Max. contact capacity - 160
	2-	Max. contact capacity - 400
	3-	Max. contact capacity - 800
4. INSERT LAYOUT PAGE 15-21	**PAGES 15-21**	The connector layout designator number represents the total number of contacts within the layout including waveguides. Consult Amphenol Canada Corporation for further availability of insert combinations. See pages 15-21.
5. SHELL TYPE	**4**	Receptacle
	5	Receptacle W/ Integral Stand-Offs (M3)
	6	Receptacle W/Integral Stand-Offs (#4-40 UNC-2B)
	Required for Press-Fit designs but can also be used on PC Tail Contacts	
6. MOUNTING MODIFIER PAGE 22-24	**PAGES 22-24**	See charts on pages 22- 24. Consult factory if other modifications are required.
7. POLARIZING POSITION PAGE 25-27	**PAGES 25-27**	Polarizing posts or keys not installed but supplied with connector see pages 25-27.
8. CONTACT MODIFIER MATERIAL	**NGX**	S&F TAIL EXTENSION
	NGA	.250" PC TAIL, ALL CONTACTS INCLUDED EXCEPT RF
	NGB	.375" PC TAIL, ALL CONTACTS INCLUDED EXCEPT RF
	G & T Options require Shell Type '5 w/ Integrated Stand-Offs'	
	NGG	.035"± .002" (.889MM) Press Fit - GOLD, ALL CONTACTS INCLUDED, EXCEPT RF
	NGT	.035" ± .002" (.889MM) Press-Fit - TIN, ALL CONTACTS INCLUDED, EXCEPT RF

RECEPTACLE



Panel Cut-Out
see page 28





How to Order - ARINC 600

ARINC 600

PART NUMBER KEY

1. RoHS Compliance	2. Connector Series	3.Class	4. Shell Style	5. Insert Layout Designator PG 15-21	6. Shell Type	7. Mounting Modifier PG 22-24	8. Polarizing Position PG 25-27	9. Contact Modifier Material
E	A	D	3-	313-	3	00	01	OO

STEPS	PART #	DESCRIPTION
1. ROHS COMPLIANCE	E	RoHS Compliant (Omit for non-RoHS compliant connectors)
2. CONNECTOR SERIES	A	ARINC 600
3. CLASS	D	Non-environmental (rear release, crimp contacts)
	E	Environmental (rear release, crimp contacts)
	F	Non-environmental (front release, solder and wrap post #22 contacts, rear release all others).
	C	Same as E, less O-rings on plug side
	S	Environmental (O-ring is used to seal between connector shell and insulators) with rear release, crimp contacts.
	Y	All positions front release (except coax/triax)
	J	All positions front release (all sizes)
4. SHELL SIZE PAGE 9-11	1-	Max. contact capacity - 160
	2-	Max. contact capacity - 400
	3-	Max. contact capacity - 800
5. INSERT LAYOUT PAGE 15-21	PAGES 15-21	The connector layout designator number represents the total number of contacts within the layout including wave guides. Consult Amphenol Canada Corporation for further availability of insert combinations. See pages 15-21.
6. SHELL TYPE	3	Plug (rack side)
	4	Receptacle (box side)
7. MOUNTING MODIFIER PAGE 22-24	PAGES 22-24	See charts on pages 22 -24. Consult factory if other modifications are required.
8. POLARIZING POSITION PAGE 25-27	PAGES 25-27	Polarizing posts or keys not installed but supplied with connector see pages 25-27.
9. CONTACT MODIFIER MATERIAL	OO	Rear release, crimp, signal and power contacts supplied with connector (when applicable)
	FO	Contacts not supplied with connector (FO not stamped on connector)
	WA	Front release .025 (0.63) Sq. x .250 (6.35) (1 wrap) wrap post and crimp, rear release power contacts (when applicable) supplied installed in connector
	WB	Front release .025 (0.63) Sq. x .375 (9.53) (2 wraps) wrap post and crimp, rear release power contacts (when applicable) supplied installed in connector
	WC	Front release .025 (0.63) Sq. x .500 (12.7) (3 wraps) wrap post and crimp, rear release power contacts (when applicable) supplied installed in connector
	WD	Front release .025 (0.64) Sq. x .641 (16.28) (3 wraps) wrap post and crimp, rear release power contacts (when applicable) supplied installed in connector

STD PCB	PRE-TINNED (TIN-LEAD)	PRE-TINNED (ROHS LEAD-FREE)	
SA	TA	RA	A=.150" (3.81) length. Front release PCB contacts, signal & power contacts installed, No RF contacts included
SB	TB	RB	B=.250" (6.35) length. Front release PCB contacts, signal & power contacts installed, No RF contacts included
SC	TC	RC	C=.375 (9.53) length. Front release PCB contacts, signal & power contacts installed, No RF contacts included
SD	TD	RD	D=.500" (12.7) length. Front release PCB contacts, signal & power contacts installed, No RF contacts included

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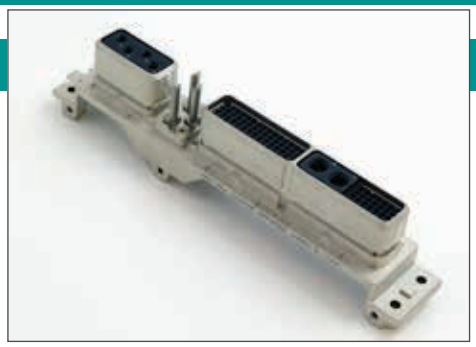
PLUG



Panel Cut-Out
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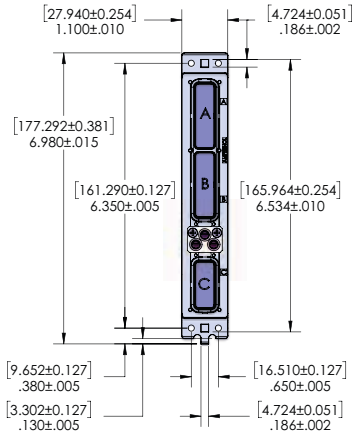
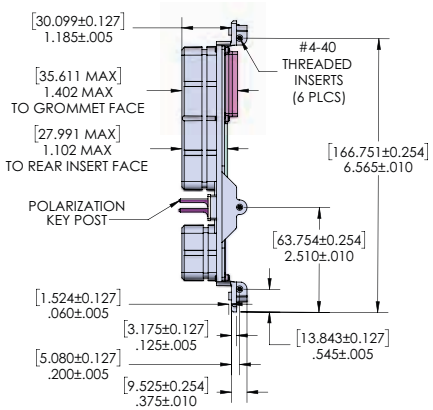
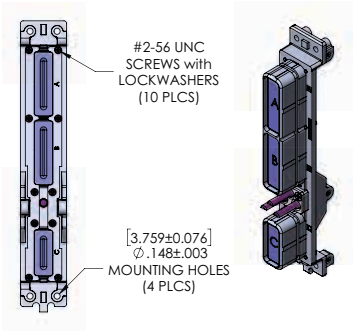
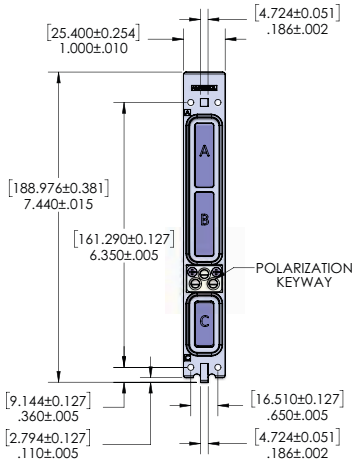


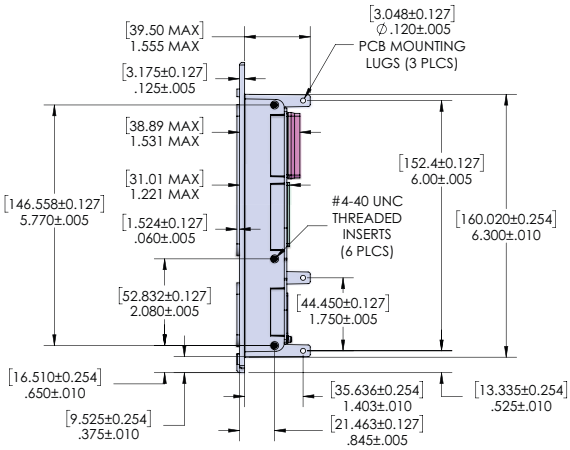


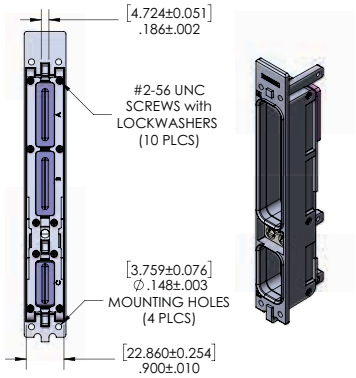


RECEPTACLE

Panel Cut-Out
see page 28





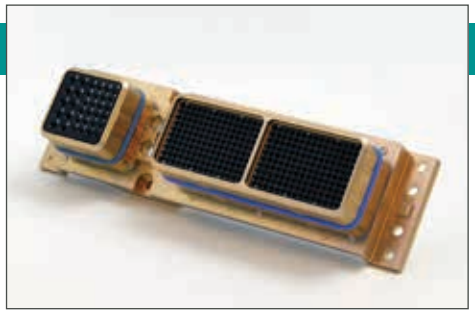


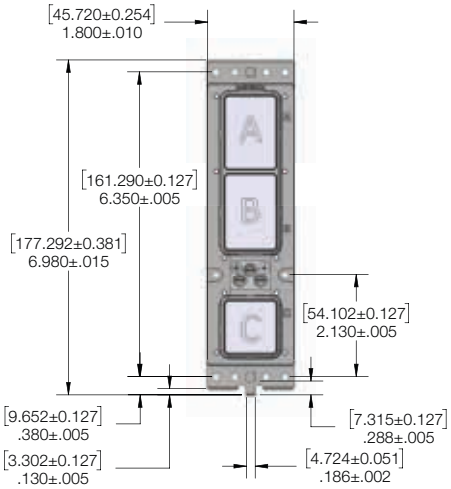
* Indicates area where “AMPHENOL”, catalog number and date code will be ink stamped per 9-5788-3. Dimensions are shown in inches, (mm). All dimensions for reference only.

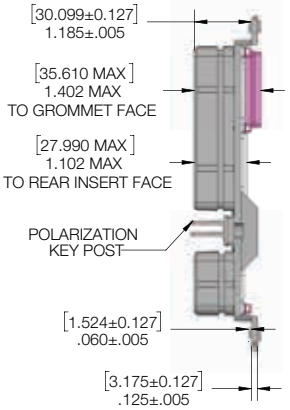
Dimensional Drawings
Shell Size 2

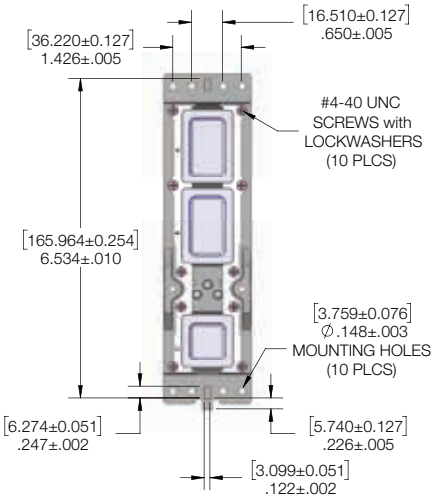
PLUG

Panel Cut-Out
see page 28









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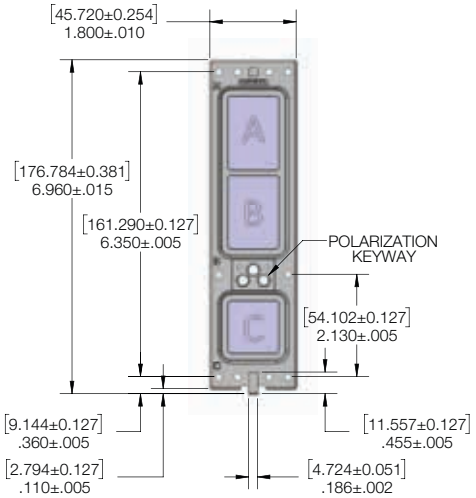

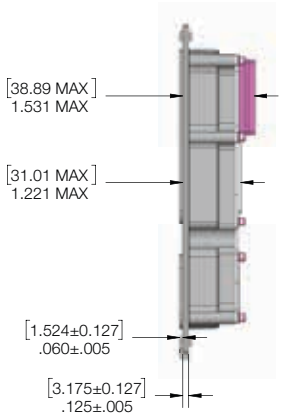

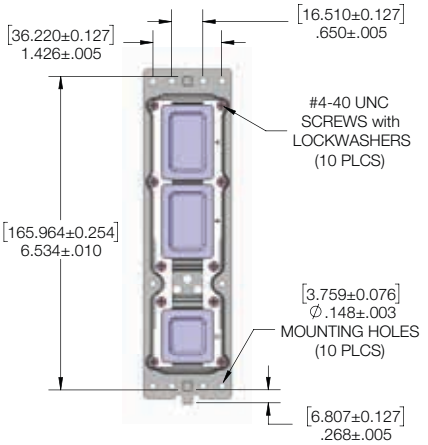

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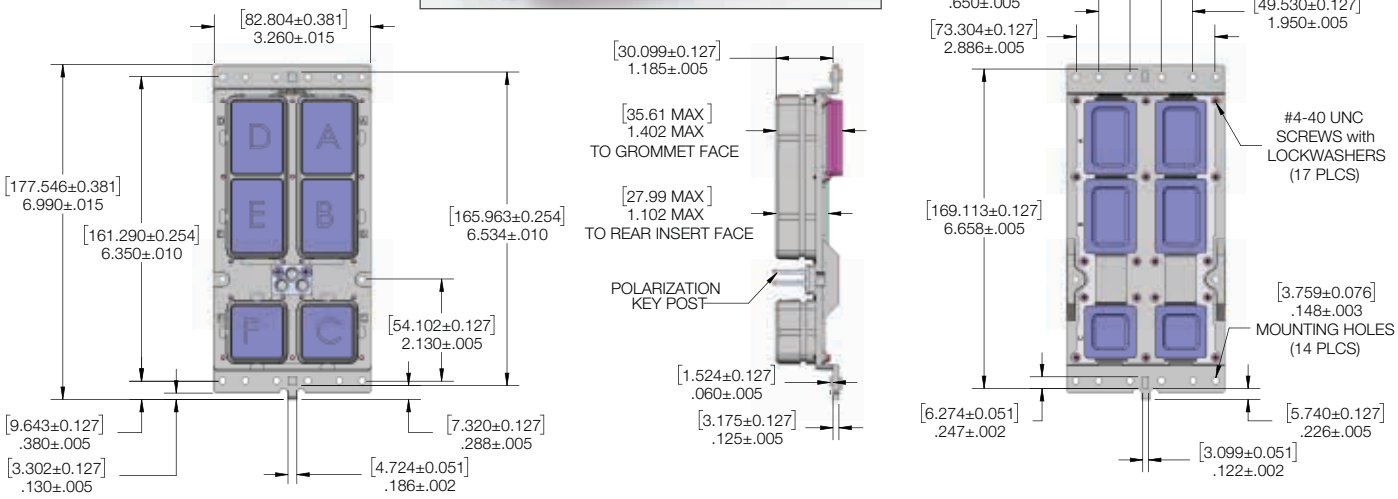

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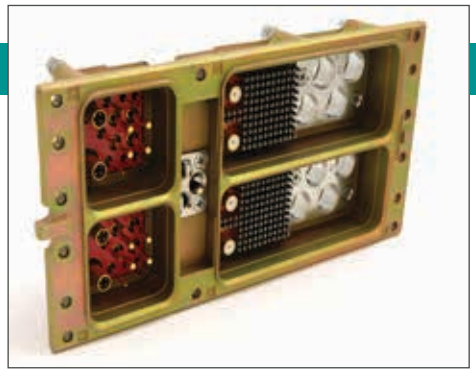

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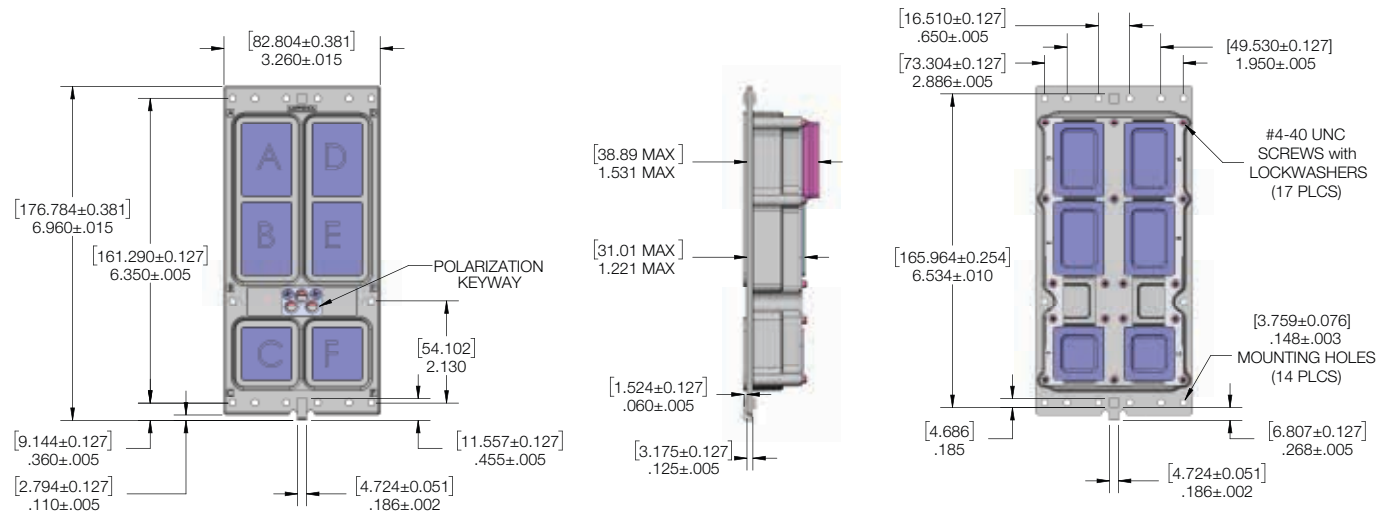

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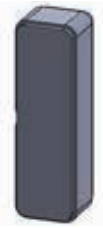
Insert Arrangements
Size 1 (A/B)

ARINC 600

Size 1 Signal (A/B)



(0)	DUMMY
QTY	Size

Q

(4)	4Q5
QTY	Size
4	5 Q

C T

(4)	4C5
QTY	Size
4	5 C

(8)	8
QTY	Size
8	12

(20)	20
QTY	Size
20	16

C T

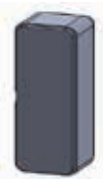
(30)	30C2 30T2
QTY	Size
28	22
2	8 C, T

(32)	32
QTY	Size
8	16
24	20

(42)	42
QTY	Size
42	20

(60)	60
QTY	Size
60	22

Size 1 Power (C)



(0)	DUMMY
QTY	Size

Q

(3)	3Q3
QTY	Size
3	8 Q

(4)	4
QTY	Size
4	12

C T

(5)	5C2
QTY	Size
2	16
1	12
2	5 C

(6)	6
QTY	Size
6	12

F

(12)	12F12
QTY	Size
12	16 F

(17)	17
QTY	Size
3	12
14	20

(22)	22
QTY	Size
6	16
16	20

(30)	30
QTY	Size
30	20

(40)	40
QTY	Size
40	22

C COAX T TWINAX OR TRIAX F FIBER Q QUADRAX

Note: Inserts are interchangable between Coax, Twinax, and Triax contacts

Contact Amphenol Canada for more information at 416-291-4401 • www.amphenolcanada.com
Download 2D drawings & 3D models using our online configurator.

(0)	DUMMY
QTY	Size

C

(2)	2C2
QTY	Size
2	1 C

C T

(4)	4C4
QTY	Size
4	1 C

C T Q

(10)	10C10 10T10 10Q10
QTY	Size
10	8 C, T, Q

C T Q

(11)	11C11 11T11 11Q11
QTY	Size
11	8 C, T, Q

F

(17)	17CF5
QTY	Size
12	12
5	16 F

C Q

(18)	18C6Q
QTY	Size
12	16 C
6	8 Q

C T

(18)	18C8 18T8
QTY	Size
10	16
8	8 C, T, Q

F Q C T

(20)	20F12C8 20F12T8 20F12Q8
QTY	Size
12	16 F
8	8 C, T, Q

(24)	24
QTY	Size
24	12

C T

(28)	28C8 28T8
QTY	Size
10	22
10	16
8	8 C, T

(35)	35
QTY	Size
35	16

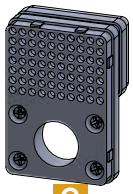
F

(36)	36F36
QTY	Size
36	16F

C T Q

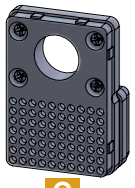
(49)	47C2 47T2 47Q2
QTY	Size
47	20
2	8 C, T, Q

(60)	60
QTY	Size
60	20



C

(71)	71C1
QTY	Size
70	22
1	1 C



C

(71)	71C1A
QTY	Size
70	22
1	1 C

C T Q

(72)	68C4 68T4 68Q4
QTY	Size
62	22
6	16
4	8 C, T, Q

C T

(82)	82C12 82T12
QTY	Size
70	22
12	12 C,T

(110)	110
QTY	Size
100	22
5	20
5	12

C T Q

(120)	120C2 120T2 120Q2
QTY	Size
118	22
2	8 C, T, Q

(121)	121
QTY	Size
110	22
6	20
5	16

(126)	126
QTY	Size
120	22
6	16

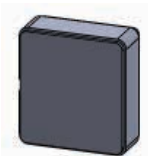
(150)	150
QTY	Size
150	22

C COAX **T TWINAX OR TRIAX** **F FIBER** **Q QUADRAX**

Note: Inserts are interchangable between Coax, Twinax, and Triax contacts

Insert Arrangements
Size 2 & 3 (C)

ARINC 600



(0)	DUMMY
QTY	Size

C T Q

(6)	6C6 6T6 6Q6
QTY	Size
6	8 C, T, Q

(8)	6P6
QTY	Size
8	6 P 6

C T Q

(1O)	10C5
QTY	Size
5	20
4	8 C

C T F

(12)	12F5C2 12F5Q2
QTY	Size
1	16
4	12
2	5 C
5	16 F

C Q

(13)	11C2 11Q2
QTY	Size
4	20
3	16
4	12
2	8 C, Q

C

(13)	13C2
QTY	Size
4	20
3	16
4	12
2	5 C

C T Q

(15)	11C4 11T4 11Q4
QTY	Size
11	16
4	8 C, T, Q

(16)	16
QTY	Size
16	12

C T F Q

(17)	17F12C2 17F12T2 17F12Q2
QTY	Size
3	16
2	8 C, T, Q
12	16 F

C T Q

(18)	18C4Q2 18T4Q2
QTY	Size
10	22
2	12
4	12 C, T
2	8 C, T, Q

F

(20)	20F12
QTY	Size
4	20
4	12
12	16 F

C T Q

(24)	24C4 24T4 24Q4
QTY	Size
20	20
4	8 C, T, Q

F

(24)	24F24
QTY	Size
24	16 F

(24)	24
QTY	Size
12	20
12	12

C T Q

(24)	24C4 24T4 24Q4
QTY	Size
20	20
4	8 C, T, Q

(25)	25
QTY	Size
25	16

(28)	28
QTY	Size
14	22
14	12

(34)	34
QTY	Size
24	20
10	16

(59)	59
QTY	Size
50	22
5	16
4	12

C T Q

(64)	62C2 62T2 62Q2
QTY	Size
60	22
2	16
2	8 C, T, Q

C T Q

(70)	68C2 68T2 68Q2
QTY	Size
68	22
2	8 C, T, Q

(84)	84
QTY	Size
80	22
4	20

(85)	85
QTY	Size
80	22
4	20
1	16

(100)	100
QTY	Size
100	22

C COAX **T TWINAX OR TRIAX** **F FIBER** **Q QUADRAX**

Note: Inserts are interchangable between Coax, Twinax, and Triax contacts

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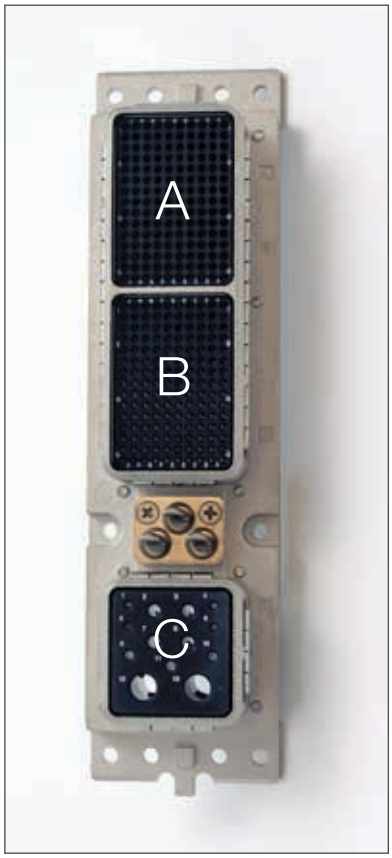
PART NUMBER KEY

1. Connector Series	2.Class	3. Shell Style	4. Insert Layout Designator PG 15-21	5. Shell Type	6. Mounting Modifier PG 22-24	7. Polarizing Position PG 25-27	8. Contact Modifier Material
A	D	3	313-	3	00	01	OO

SIZE 1 ARINC 600				
# OF CONTACTS	INSERT LAYOUT DESIGNATOR	SHELL CAVITY INSERT POSITION		
		A	B	C
5	005-	EMPTY	EMPTY	5C2
30	030Q-	30Q2	DUMMY	DUMMY
35	035-	30T2	DUMMY	5C2
48	048Q-	4Q4	4Q4	40
60	060-	EMPTY	60	EMPTY
60	A060-	60	EMPTY	EMPTY
60	C060-	60	DUMMY	DUMMY
65	065-	EMPTY	60	5C2
65	065A-	DUMMY	60	5C2
65	A065-	60	DUMMY	5C2
65	065B-	DUMMY	60	5C2
65	065Q-	60	DUMMY	5Q2
65	B065-	30T2	30T2	5C2
70	070-	DUMMY	30T2	40
70	A070Q-	EMPTY	28Q2	40
90	090Q-	60	28Q2	DUMMY
94	094-	30T2	60	4
95	095-	60	30T2	5C2
95	095Q-	60	28Q2	5C2
95	095A-	30T2	60	5C2
95	A095Q-	60	28Q2	5Q2
100	100-	30T2	30T2	40
100	100A-	60	DUMMY	40
112	112T-	60	30T2	22
120	120-	60	60	EMPTY
120	A120-	60	60	DUMMY
124	124-	60	60	4
125	125-	60	60	5C2
130	130-	60	30T2	40
160	160-	60	60	40



Insert Layout Designator

Size 2

ARINC 600

SIZE 2 ARINC 600				
# of contacts	INSERT LAYOUT DESIGNATOR	Shell Cavity Insert Position		
		A	B	C
11	011Q-	11Q11	EMPTY	EMPTY
13	013-	EMPTY	EMPTY	13C2
17	017-	2C2	2C2	13C2
20	020-	DUMMY	DUMMY	20F12
20	020F-	DUMMY	DUMMY	20F12
24	024-	DUMMY	11Q11	11Q2
24	024Q-	DUMMY	11Q11	13C2
26	26-	10C10	10C10	6C6
28	028Q-	11Q11	11Q11	6Q6
28	A028Q-	DUMMY	4C4	20Q4
30	030F-	DUMMY	18T8	12F5C2
33	033-	10T10	10T10	13C2
33	033Q-	11Q11	11Q11	13C2
33	033QT-	10T10	10T10	11Q2
33	A033Q-	11Q11	11Q11	11Q2
34	034Q-	11Q11	10T10	11Q2
35	035-	DUMMY	11Q11	20Q4
39	039QF-	11Q11	11Q11	17F12Q2
40	040F-	DUMMY	28T8	12F5C2
45	045Q-	11Q11	BLANK	34
54	054QF-	20F12Q8	BLANK	34
56	056A-	28T8	28T8	DUMMY
59	059-	EMPTY	EMPTY	59
60	060-	60	DUMMY	DUMMY
60	A060-	24	24	12 custom
65	065Q-	11Q11	11Q11	41Q2
66	066-	DUMMY	60	6T6
67	067Q-	121	10Q10	6Q6
68	068Q-	121	11Q11	6Q6
69	069-	28T8	28T8	13C2
69	069QC-	DUMMY	10Q6C4	59
69	A069-	10T10	DUMMY	59
70	070Q-	11Q11	DUMMY	59
70	070T-	4C4	4C4	62T2
71	071-	EMPTY	71C1	1
71	A071-	71C1	EMPTY	EMPTY
73	073-	DUMMY	60	13C2
74	074Q-	4C4	11Q11	59
75	75C-	60	2C2	13C2
76	076Q-	10T10	60	6Q6
79	079-	10T10	10T10	59
81	081-	11T11	11T11	59
81	081Q-	11Q11	11Q11	59
82	082-	24	24	34
84	084-	DUMMY	71C1	13C2
84	084QT-	11Q11	11Q11	62T2
85	085-	WAVE	71C1	13C2
85	085B-	W1	71C1	13C2
85	A085-	71C1	WAVE	13C2
86	086-	C2	71C1	13C2
86	086Q-	11Q11	11Q11	62Q2
86	86M-	2C2	71C1	13C2
88	088QC-	71C1	4C4	11Q2
92	092Q-	11Q11	11Q11	68Q2
93	093-	4C4	4C4	85
94	094-	60	DUMMY	34
94	094A-	10T10	71C1	13C2
95	095F-	36F36	DUMMY	59
95	95F-	DUMMY	36F36	59
96	096A-	68Q4	11Q11	13C2

SIZE 2 ARINC 600				
# of contacts	INSERT LAYOUT DESIGNATOR	Shell Cavity Insert Position		
		A	B	C
96	096Q-	DUMMY	11Q11	85
96	096QF-	11QF11	Blank	85
98	098-	4C4	35	59
99	099CF-	50	36F36	13C2
100	100-	DUMMY	EMPTY	100
105	105-	10T10	10T10	85
105	A105-	71C1	BLANK	59
105	105F-	11Q11	60	34
107	107Q-	11Q11	11Q11	85
111	111Q-	DUMMY	11Q11	100
111	111QC-	68Q4	11Q11	32C2
112	112-	24	24	64T2
112	112Q-	24	24	62Q2
115	115Q-	4C4	11Q11	100
115	115-	150	2C2	13C2
116	116QF-	20F12Q8	11Q11	85
116	A116QF-	11Q11	A20F12Q8	85
118	118-	24	60	34
119	119-	60	DUMMY	59
120	120-	DUMMY	120T2	DUMMY
121	121-	DUMMY	121	DUMMY
122	122Q-	11Q11	11Q11	100
123	A123-	4C4	60	59
123	123-	60	4C4	59
124	124Q-	28	28	68Q2
124	124-	DUMMY	24	100
126	126Q-	24	68Q4	34
127	127Q-	DUMMY	121	6Q6
128	128-	4C4	24	100
130	130Q-	10T10	118Q2	DUMMY
131	131FQ-	20F12T8	11Q11	100
131	131Q-	121	4C4	6Q6
131	131QC-	11Q11	118Q2	DUMMY
131	131-	121	10T10	DUMMY
133	133Q-	DUMMY	118Q2	13C2
133	A133-	120T2	DUMMY	13C2
133	133-	DUMMY	120T2	13C2
134	134Q-	35	35	68Q2
135	135Q-	118Q2	2C2	13C2
137	137A-	4C4	120T2	13C2
137	137B-	120T2	4C4	13C2
137	137D-	4C4	120T2	13C2
137	137E-	4C4	120C2	13C2
137	137Q-	121	10Q10	6Q6
137	137-	121	10T10	6T6
138	138-	11Q11	6Q6	121
138	138CF-	121	DUMMY	17F12Q2
138	138Q-	11Q11	121	6Q6
138	A138Q-	121	11Q11	6Q6
138	B138Q-	121A	4C4	11Q2/13Q2
140	140-	110	24	6Q6
141	141FQ-	20F12Q8	121	DUMMY
141	T141-	120T2	10T10	13C2
142	142-	71C1	71C1	EMPTY
143	143-	24	60	59
143	A143-	120T2	10T10	13C2
143	143Q-	11Q11	118Q2	12F5C2
143	A143Q-	118Q2	10T10	13C2
143	B143Q-	118Q2	10T10	11Q2
144	144Q-	118Q2	11Q11	13C2
144	A144Q-	120T2	11Q11	13C2

Insert Layout Designator
Size 2

SIZE 2 ARINC 600				
# of contacts	INSERT LAYOUT DESIGNATOR	Shell Cavity Insert Position		
		A	B	C
144	144QT-	11Q11	120T2	11Q2
144	C144Q-	11Q11	120Q2	11Q2
145	145Q-	DUMMY	118Q2	25
148	148A-	24	24	100
148	148-	71C1	18T8	59
152	152Q-	24	28T8	100
153	153TF-	20F12T8	120T2	13C2
154	154-	60	60	34
155	155-	71C1	71C1	13C2
156	156Q-	11Q11	120Q2	25
156	156Q-	150	DUMMY	6Q6
156	A156-	28T8	28T8	100
156	B156-	150	DUMMY	6T6
156	B156Q-	150	DUMMY	6Q6
158	158M-	2C2	71C1A	85
158	158T-	110	24	24T4
161	161Q-	150	EMPTY	11Q2
162	162CF-	121	24	17F12Q2
163	163A-	150	DUMMY	13C2
163	163B-	DUMMY	150	13C2
163	A163-	150	EMPTY	13C2
163	163QF-	36F36	121	6Q6
163	163-	EMPTY	150	13C2
164	164-	150	WAVE	13C2
164	A164-	WAVE	150	13C2
165	165M-	150	2C2	13C2
165	165Q-	11Q11	118Q2	34
165	165Q-	150	2C2	13Q2
165	165R-	150	2C2	13Q2
165	A165-	2C2	150	13C2
165	165-	150	2C2	13C2
167	167-	150	4C4	13C2
167	167C-	4C4	150	13C2
167	167Q-	150	11Q11	6T6
167	167QC-	4C4	150	11Q2
167	A167Q-	11Q11	150	6Q6
167	B167Q-	150	11Q11	6Q6
168	168Q-	150	18Q8	DUMMY
170	170-	35	35	100
171	171-	WAVE	71C1	100
173	173A-	10T10	150	13C2
173	173QF-	17C12F5	150	6Q6
173	173-	150	10T10	13C2
174	174-	150	24	DUMMY
174	174Q-	150	11Q11	13C2
174	A174Q-	DUMMY	150	20Q4
174	B174Q-	150	11Q11	11Q2
174	C174Q-	11Q11	150	11Q2
174	D174Q-	11Q11	150	13C2
174	E174Q-	10Q10	150	11T2
174	F174Q-	11Q11	150	11T2
174	T174-	DUMMY	150	24T4
174	T174Q-	150	18T8	6Q6
174	174C-	11C11	150	13C2
175	175-	150	DUMMY	25
178	178QF-	150	11Q11	17F12Q2
187	187-	121	60	6T6
184	B184-	24	60	100
184	184-	150	DUMMY	34
184	A184-	4C4	121	59
188	188-	150	4C4	34

SIZE 2 ARINC 600				
# of contacts	INSERT LAYOUT DESIGNATOR	Shell Cavity Insert Position		
		A	B	C
191	191T-	28T8	150	13C2
194	194F-	150	24	20F12
194	A194Q-	10Q10	150	34
194	194Q-	150	10Q10	34
195	195Q-	150	11Q11	34
195	A195Q-	11Q11	150	34
195	B195QF-	20F12Q8	150	25
198	198Q-	150	24	20Q4
199	199FC-	150	36F36	13C2
199	C199Q-	71C1A	118Q2	12F5C2
200	200Q-	11Q11	121	68Q2
201	201CF-	17F5	150	34
202	202-	150	18tT8	34
202	202Q-	71C1A	118Q2	12F5C2
205	205A-	120T2	DUMMY	85
205	205-	71C1	121	13C2
208	208-	150	24	34
209	209A-	4C4	120T2	85
209	209Q-	150	35	20Q4
209	C209Q-	4C4	118Q2	85
209	A209-	EMPTY	150	59
209	B209-	150	DUMMY	59
209	A209Q-	150	11Q11	46Q2
209	209-	DUMMY	150	59
213	213-	150	4C4	59
215	215Q-	11Q11	120T2	85
215	215-	121	60	34
218	218-	110	49T2	59
219	219-	150	10T10	59
220	220-	110	110	DUMMY
220	A220-	150	60	10
220	220B-	60	60	100
220	220Q-	11Q11	150	59
223	223-	150	60	13C2
223	223FQ-	150	11Q11	62F12
225	225QF-	20F12Q8	118Q2	85
225	225Q-	11Q11	150	62Q2
229	229QF-	20F12T8	150	59
231	231Q-	11Q11	150	68Q2
231	231-	10T10	121	100
232	232Q-	11Q11	121	100
234	A234-	71C1	150	13C2
234	B234M-	71C1A	150	13C2
234	234-	150	71C1	13C2
235	235-	150	DUMMY	85
237	237A-	150	28T8	59
238	238F-	18T8	120T2	100
242	242-	121	121	DUMMY
242	242A-	71C1	71C1	100
242	242B-	121	121	EMPTY
244	244-	150	60	34
244	244A-	60	150	34
245	245F-	150	36F36	59
245	245Q-	150	10T10	85
245	245T-	10T10	150	85
245	A245Q-	10Q10	150	85
246	246Q-	150	11Q11	85
246	246-	120T2	120T2	6T6
248	248-	121	121	6T6
248	248A-	28T8	120T2	100
248	248K-	121	121	6T6

Insert Layout Designator
Size 2

ARINC 600

SIZE 2 ARINC 600				
# of contacts	INSERT LAYOUT DESIGNATOR	Shell Cavity Insert Position		
		A	B	C
250	250-	EMPTY	150	100
250	250A-	150	DUMMY	100
253	253C-	120C2	120C2	11Q2
253	253Q-	120T2	120T2	11Q2
253	A253Q-	120T2	118Q2	11Q2
253	253-	120T2	120T2	13C2
254	254F-	150	4C4	100
255	255Q-	121	121	11Q2
260	260-	150	10T10	100
261	261Q-	150	11Q11	100
262	262F-	121	121	20F12
262	262Q-	150	12F4	100
263	263T-	28T8	150	85
264	264Q-	118Q2	118Q2	24T4
264	A264Q-	118Q2	118Q2	20Q4
266	266-	150	110	6P6
268	268FQ-	150	18T8	100
270	270FQ-	20F12T8	150	100
271	271F-	150	36F36	85
271	A271-	121	150	Dummy
274	A274-	150	24	100
274	274A-	120T2	120T2	34
274	274-	24	150	100
276	276-	121	121	34
267	267-	150	104	13C2
277	277FQ-	110	150	17F12Q2
277	277Q-	150	121	6Q6
282	282-	126	150	6Q6
283	283C-	120C2	150	13C2
283	283Q-	150	118Q2	11Q2
283	283QF-	150	121	12F5Q2
283	A283-	120T2	150	13C2
283	B283-	150	118Q2	13C2
283	283-	150	120T2	13C2
284	284-	150	121	13C2
284	284Q-	150	121	11Q2
284	A284-	121	150	13C2
285	285-	150	35	100
288	288TF-	121	150	17F12T2
290	290Q-	121	121	46Q2
291	291-	71C1A	120T2	100
294	294-	150	110	34
294	A294Q-	150	120T2	20Q4
294	294C-	150	120T2	24T4

SIZE 2 ARINC 600				
# of contacts	INSERT LAYOUT DESIGNATOR	Shell Cavity Insert Position		
		A	B	C
295	295-	150	121	24T4
295	295Q-	150	121	20Q4
300	300-	150	150	DUMMY
300	B300-	150	150	EMPTY
301	301-	121	121	59
304	A304-	120T2	150	34
304	304-	150	120T2	34
305	305-	150	121	34
306	306-	150	150	6T6
310	310-	60	150	100
310	310A-	150	60	100
312	312F-	150	150	12F5C2
313	313-	150	150	13C2
313	313Q-	150	150	11Q2
317	317TF-	150	150	17F12T2
321	321-	150	71C1	100
324	324F-	150	150	24F4
324	324Q-	150	150	20Q4
324	A324Q-	150	150	20Q4
324	324-	150	150	24T4
325	325Q-	118Q2	118Q2	85
327	327-	121	121	85
329	329-	120T2	150	59
329	A329-	150	120T2	59
330	330-	150	121	59
334	334-	150	150	34
338	338F-	150	120F2	68F2
338	338Q-	150	118Q2	68Q2
340	340-	120T2	120T2	100
342	342-	121	121	100
357	357-	150	150	57
359	359-	150	150	59
368	368Q-	150	150	68Q2
370	370-	150	120T2	100
371	371A-	121	150	100
371	371-	150	121	100
385	385-	150	150	85
400	400-	150	150	100

SIZE 3 ARINC 600							
# OF Contacts	INSERT LAYOUT DESIGNATOR	Shell Cavity Insert Position					
		A	B	C	D	E	F
21	021-	4C4	4C4	13C2	EMPTY	EMPTY	-
26	026-	EMPTY	EMPTY	13C2	EMPTY	EMPTY	13C2
50	050-	4C4	4C4	DUMMY	4C4	4C4	34
56	056Q-	11Q11	11Q11	6Q6	11Q11	11Q11	6Q6
66	066Q-	11Q11	11Q11	11Q2	11Q11	11Q11	11Q2
70	070-	11W11	11W11	13C2	11W11	11W11	13C2
103	103-	11W11	11W11	DUMMY	11W11	11W11	59
113	113-	EMPTY	EMPTY	100	EMPTY	EMPTY	13C2
113	A113-	EMPTY	EMPTY	13C2	EMPTY	EMPTY	100
114	114-	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY	EMPTY
121	121-	121	DUMMY	EMPTY	DUMMY	DUMMY	EMPTY
137	137A-	4C4	120T2	13C2	EMPTY	EMPTY	EMPTY
156	156Q-	DUMMY	10T10	25	11Q11	10T10	100
162	162-	11W11	11W11	59	11W11	11W11	59
164	164QC-	150	4C4	6Q6	BLANK	4C4	BLANK
168	168QC-	150	4C4	6Q6	4C4	4C4	BLANK
168	168Q-	11Q11	11Q11	100	11Q11	11Q11	20Q4
172	172Q-	150	BLANK	6Q6	10Q10	BLANK	6Q6
178	178F-	4C4	120T2	17F12Q2	4C4	120T2	11Q2
190	190QT-	10T10	10T10	6T6	10T10	118Q2	34
192	192-	24	24	100	BLANK	10T10	34
207	207Q-	11Q11	11Q11	DUMMY	11Q11	150	20Q4
209	209Q-	11Q11	11Q11	11Q2	11Q11	150	11Q2
214	214Q-	11Q11	11Q11	85	11Q11	11Q11	85
219	219-	28T8	28T8	13C2	28T8	DUMMY	DUMMY
222	222-	11Q11	DUMMY	100	11Q11	DUMMY	100
225	225Q-	11Q11	150	62Q2			
231	231-	121	10T10	100	EMPTY	EMPTY	EMPTY
242	242CT-	8C8	120T2	85	13C5	10T10	6T6
246	246Q-	11Q11	11Q11	68Q2	60	60	34
259	259Q-	4C4	120T2	DUMMY	4C4	120T2	11Q2
261	261C-	4C4	120T2	DUMMY	4C4	120T2	13C2
261	261QC-	4C4	120T2	blank	4C4	120T2	11Q2
264	264Q-	118Q2	120	EMPTY	EMPTY	EMPTY	EMPTY
268	268C-	10C10	10C10	6C6	121	121	blank
269	269M-	2C2	2C2	13C2	2C2	150	100
270	270QT-	4C4	120T2	11Q2	4C4	120T2	11Q2
271	271B-	4C4	4C4	13C2	EMPTY	150	100
271	271C-	4C4	4C4	13C2	DUMMY	150	100
271	271M-	2C2	2C2	13C2	4C4	150	100
272	272-	4C4	4C4	13C2	121	150	100
272	272QT-	4C4	120T2	11Q2	4C4	120T2	13C2
274	274Q-	4C4	120T2	11Q2	4C4	120T2	11Q2
274	B274-	4C4	120T2	13C2	4C4	120T2	13C2
274	274-	4C4	120T2	11Q2	4C4	120T2	11Q2
278	278QF-	4C4	118Q2	17F12Q2	4C4	118Q2	13C2
280	280QF-	36F36	36F36	11Q2	36F36	150	11Q2
284	284-	71C1	71C1	EMPTY	71C1	71C1	EMPTY
293	293QF-	11T11	20F12Q8	25	120C2	17C12F5	100
296	296QT-	11T11	11T11	11Q2	11T11	150	100
296	A296-	24	24	100	24	24	100
307	307Q-	110	11Q11	6Q6	24	150	6Q6
308	308-	60	60	34	60	60	34
310	310-	71C1	71C1	13C2	71C1	71C1	13C2
313	313A-	150	DUMMY	13C2	150	DUMMY	DUMMY
322	322Q-	150	11Q11	54	11Q11	11Q11	85
326	326-	EMPTY	150	13C2	EMPTY	150	13C2
328	328QC-	150	11Q11	6C6	150	11Q11	DUMMY

Insert Layout Designator

Size 3

ARINC 600

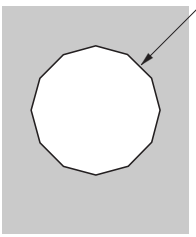
SIZE 3 ARINC 600							
# OF Contacts	INSERT LAYOUT DESIGNATOR	Shell Cavity Insert Position					
		A	B	C	D	E	F
328	328Q-	126	150	11Q2	11Q11	11Q11	11Q2
330	330M-	2C2	2C2	13C2	150	150	13C2
330	A330-	150	150	13C2	2C2	2C2	13C2
333	333-	150	10T10	11Q2	150	10T10	DUMMY
360	360-	150	150	34	10T10	10T10	6T6
362	362Q-	150	150	34	11Q11	10T10	6Q6
362	Q362-	11Q11	11Q11	6C6	150	150	34
387	387Q-	11Q11	11Q11	6Q6	150	150	59
387	387-	24	24	34	150	121	34
394	394QF-	36F36	36F36	11Q2	150	150	11Q2
404	404-	150	10T10	11Q2	150	11Q11	68Q2
405	405QT-	150	11T11	11Q2	150	11Q11	68Q2
410	410-	60	10T10	6T6	150	150	34
421	421-	4C4	4C4	13C2	150	150	100
422	422-	150	28T8	11Q2	150	11Q11	68Q2
428	428QC-	150	11Q11	6C6	150	11Q11	100
440	440-	60	60	100	60	60	100
444	444-	150	121	13C2	150	10T10	DUMMY
450	450-	150	150	6W6	121	10T10	13C2
450	450A-	150	150	EMPTY	121	EMPTY	13C2
454	454-	150	150	DUMMY	121	DUMMY	13C2
454	454Q-	126	150	11Q2	150	11Q11	6Q6
460	460-	121	DUMMY	59	121	DUMMY	59
468	468-	150	71C1	13C2	150	71C1	13C2
470	470-	150	EMPTY	85	150	EMPTY	85
476	476-	150	150	13C2	EMPTY	150	13C2
486	486-	10T10	121	100	121	121	13C2
487	487Q-	11Q11	150	13C2	150	150	13C2
490	490F-	150	36F	59	150	36F	59
494	494-	121	120T2	6T6	121	120T2	6T6
496	496-	121	121	6T6	121	121	6T6
502	502-	60	24	59	150	150	59
508	508QF-	36F36	150	11Q2	150	150	11Q2
510	510-	121	121	13C2	121	121	13C2
510	510A-	DUMMY	150	100	10T10	150	100
536	536F-	150	18T8	100	150	18T8	100
537	537-	4C4	120T2	100	150	150	13C2
537	A537-	150	150	13C2	4C4	120T2	100
537	537A-	121	24	100	121	71C1	100
543	543-	121	121	EMPTY	121	121	59
546	546Q-	11Q11	150	85	150	150	DUMMY
546	A546Q-	11Q11	150	85	150	150	EMPTY
552	552-	121	121	34	121	121	34
554	554-	121	150	6P6	121	150	6P6
554	554B-	121	150	6T6	150	121	6T6
556	556-	150	28	100	150	28	100
559	559-	10T10	120T2	100	150	120T2	59
570	570QF-	150	118Q2	17F12Q2	150	118Q2	13C2
574	574QF-	150	118Q2	17F12Q2	150	118Q2	17F12Q2
585	585-	150	150	25	150	10T10	100
596	596-	121	110	100	121	110	34
600	600-	150	150	EMPTY	150	150	EMPTY
602	602-	121	121	59	121	121	59
608	608-	150	24	100	150	150	34
608	A608-	150	150	34	150	24	100
608	B608-	120T2	150	34	120T2	150	34
612	612Q-	150	150	6Q6	150	150	6Q6
613	613-	150	150	DUMMY	150	150	13C2
618	618Q-	150	150	100	150	DUMMY	68Q2
619	619Q-	150	150	11Q2	150	150	6T6

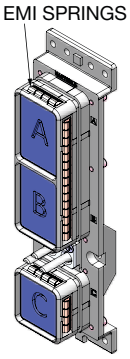
SIZE 3 ARINC 600							
# OF Contacts	INSERT LAYOUT DESIGNATOR	Shell Cavity Insert Position					
		A	B	C	D	E	F
619	A619Q-	150	150	6Q6	150	150	13C2
620	620Q-	11Q11	150	59	150	150	100
620	620-	150	60	100	150	60	100
626	626-	150	150	13C2	150	150	13C2
626	626-	150	150	13C2	150	150	13C2
626	626Q-	150	150	11Q2	150	150	11Q2
630	630QF-	150	150	13C2	150	150	17F12Q2
631	631-	10T10	150	100	121	150	100
633	633T-	150	150	100	150	24	59
636	636QT-	150	150	18T4Q2	150	150	18T4Q2
638	638Q-	150	118Q2	34	150	150	34
645	645-	121	24	100	150	150	100
646	646QF-	150	150	100	11QF11	150	85
646	646Q-	11Q11	150	85	150	150	62Q2
648	648-	150	150	24	150	150	24
652	652QF-	150	150	12F5C2	118Q2	118Q2	100
653	653-	150	150	13C2	120T2	120T2	100
664	664QT-	150	150	59	150	150	5QT2
665	A665T-	150	150	59	150	150	6T6
665	665T-	150	150	6T6	150	150	59
668	668-	150	150	34	150	150	34
670	670Q-	121	150	62Q2	121	150	62Q2
671	671Q-	11Q11	150	85	150	150	85
674	674Q-	150	150	6Q6	150	150	68Q2
675	675-	150	150	16	150	150	59
678	678T-	150	150	100	150	28T8	100
680	680-	120T2	120T2	100	120T2	120T2	100
693	693-	150	150	59	150	150	34
699	699-	150	120T2	100	150	120T2	59
700	700-	150	150	DUMMY	150	150	100
710	710Q-	150	118Q2	85	150	118Q2	85
710	710-	150	120T2	85	150	120T2	85
712	712-	150	150	12F5C2	150	150	100
713	713-	150	150	100	150	150	13C2
713	A713-	150	150	13C2	150	150	100
713	713A-	150	150	100	150	150	11Q2
718	718-	150	150	59	150	150	59
734	734-	150	150	100	150	150	34
740	740-	150	120T2	100	150	120T2	100
740	740Q-	150	150	68Q2	150	150	68Q2
742	742-	121	150	100	121	150	100
742	742B-	121	150	100	150	121	100
756	756-	150	150	100	150	121	85
759	759-	150	150	59	150	150	100
767	767-	150	150	85	150	150	85
770	770-	150	150	85	150	150	85
770	770Q-	150	150	100	150	150	68Q2
784	784-	150	150	84	150	150	100
785	785-	150	150	100	150	150	85
800	800-	150	150	100	150	150	100

ARINC 600

PART NUMBER KEY

1. Connector Series	2.Class	3. Shell Style	4. Insert Layout Designator PG 15-21	5. Shell Type	6. Mounting Modifier PG 22-24	7. Polarizing Position PG 25-27	8. Contact Modifier Material
A	D	3	313	3	00	01	OO





STANDARD **MOUNT**

No. of Thru Holes	Hole Location	Dia. Ø In (mm)	Features	(MOUNTING MODIFIER) PLATING PART NUMBER						
				Chemical Conversion Class 3	Chemical Conversion Class 1A	RoHS Compliant Chemical Conversion	Electroless Nickel	Yellow Cadmium	Olive Drab	Nickel-PTFE/ Durmalon™
ALL	B	0.148 (3.76)		00	90	R0	89	70	D0	NA
			3 Lugs Removed (SZ 1 REC Only)	02	95	R2	91	72	DB	ND
4	A	0.165 (4.19)		1A	2H	R9	AJ	12	DJ	NK
(MOUNTING MODIFIER) STANDARD MOUNTING WITH EMI SPRINGS (PLUG ONLY)										
ALL	B	0.148 (3.76)	EMI SPRING	*20	*2J	*RA	17	19	DK	NL

Amphenol does not recommend Chem Film plating with EMI springs due to this plating's tendency to scratch and/or flake off during repeated mating cycles.

MOUNTING **LOCATION FIGURE**

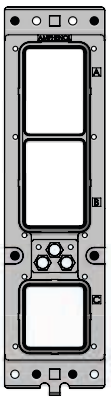
A Corner Holes

B All Holes

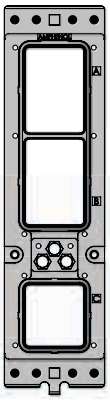
C Middle Holes

D Inside & Middle Holes

E Top Corner, Middle & Inside Bottom Holes

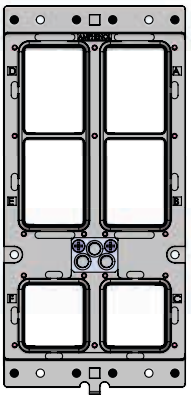


F Top & Bottom Row Holes

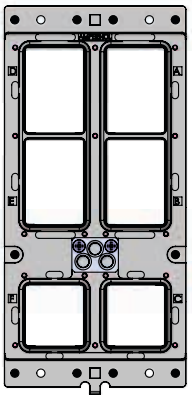


G Corner & Middle Holes

H Corner & Inside Middle Holes



J Corner & Inside Middle & Middle Holes



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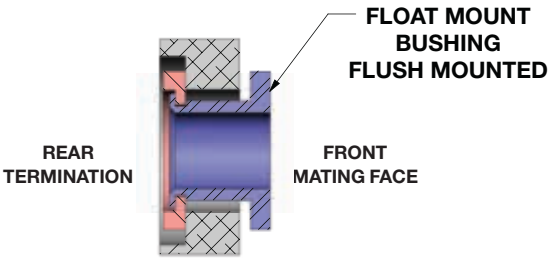
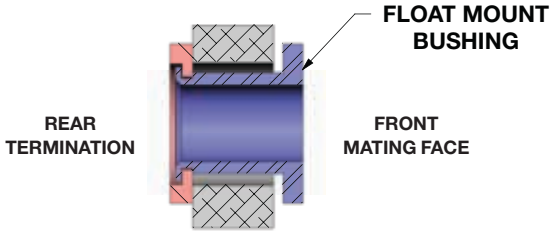
PART NUMBER KEY

1. Connector Series	2.Class	3. Shell Style	4. Insert Layout Designator PG 15-21	5. Shell Type	6. Mounting Modifier PG 22-24	7. Polarizing Position PG 25-27	8. Contact Modifier Material
A	D	3	313	3	00	01	OO





Note: The Float Mount Bushing -Flush Mount is non-standard and available upon request, please consult the factory for more information.

FLOAT **MOUNT**

Shell Sizes	Radial Float MIN In (mm)	No. of Float Mounts	Hole Location	Features	(MOUNTING MODIFIER) PLATING PART NUMBER						
					Chemical Conversion Class 3	Chemical Conversion Class 1A	RoHS Compliant Chemical Conversion	Electroless Nickel	Yellow Cadmium	Olive Drab	Nickel-PTFE/ Durmalon™
ALL	0.048 (1.22)	4	A		23	2L	RC	AK	7A	DM	NN
	0.030 (0.76)				SB	35	M3	C2	8B	E4	P4
2	0.030 (0.76)	8	F		1L	21	RP	AR	B1	D2	N3
3			H								

FLOAT **MOUNT** WITH EMI SPRINGS (PLUG ONLY)

ALL	0.048 (1.22)	4	A	EMI SPRING	*1C	*2N	*RE	27	7C	DP	NR
2	0.030 (0.76)	8	F		*1D	*2R	*RG	92	7E	DS	NT
3		8	H								

Amphenol does not recommend Chem Film plating with EMI springs due to this plating's tendency to scratch and/or flake off during repeated mating cycles.

MOUNTING **LOCATION FIGURE**

A Corner Holes

B All Holes

C Middle Holes

D Inside & Middle Holes

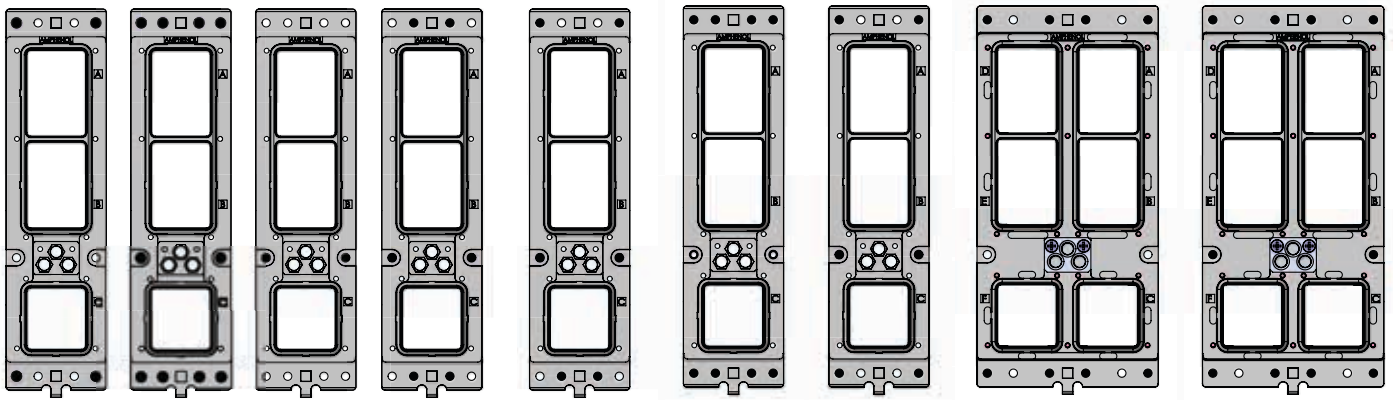
E Top Corner, Middle & Inside Bottom Holes

F Top & Bottom Row Holes

G Corner & Middle Holes

H Corner & Inside Middle Holes

J Corner & Inside Middle & Middle Holes

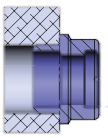


Mounting Modifier
Clinch Nut with EMI Springs

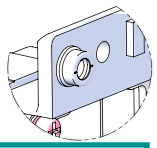
PART NUMBER KEY

1. Connector Series	2.Class	3. Shell Style	4. Insert Layout Designator PG 15-21	5. Shell Type	6. Mounting Modifier PG 22-24	7. Polarizing Position PG 25-27	8. Contact Modifier Material
A	D	3	313	3	00	01	OO

Front Mating Face

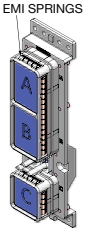


Rear Termination



CLINCH **NUTS**

Clinch Nut Size	Connector Size	No. of Clinch Nuts				Features	(MOUNTING MODIFIER) PLATING						
		Plug	Hole Location	Receptacle	Hole Location		Chemical Conversion Class 3	Chemical Conversion Class 1A	RoHS Compliant Chemical Conversion	Electroless Nickel	Yellow Cadmium	Olive Drab	Nickel-PTFE/ Durmalon™
#4-40	1	NA		4	A	3 Lugs Removed (REC Only)	1F	2T	RJ	94	7G	DU	NV
		4	A				03	2B	R3	AN	73	DC	NE
	2	2	C	2	C		10	2F	R7	AG	77	DG	NH
		4	A	6	G		03	2B	R3	AN	73	DC	NE
		6	G	4	A		SC	2U	M7	AU	7S	E7	P8
		6	D	6	D		1H	2V	RL	AD	7J	DW	NY
		8	F	8	F		S9	33	M1	A9	7V	E2	P2
		10	B	10	B		08	2D	R5	AB	75	DE	NG
	3	2	C	2	C		10	2F	R7	AG	77	DG	NH
		8	H	10	J		03	2B	R3	AN	73	DC	NE
		10	J	8	H		SC	2U	M7	AU	7S	E7	P8
		12	F	12	F		S9	33	M1	A9	7V	E2	P2
		14	B	14	B		08	2D	R5	AB	75	DE	NG
#6-32	1	NA		4	A	3 Lugs Removed (REC Only)	1E	2S	RH	93	7F	DT	NU
		4	A				01	2A	R1	AA	71	DA	NC
	2	2	C	2	C		11	2G	R8	AH	78	DH	NJ
		4	A	6	G		01	2A	R1	AA	71	DA	NC
		6	G	6	E		04	2C	R4	AE	74	DD	NF
		8	F	8	F		SA	34	M2	C1	8A	E3	P3
		10	B	10	B		09	2E	R6	AC	76	DF	NB
	3	2	C	2	C		11	2G	R8	AH	78	DH	NJ
		8	H	10	J		01	2A	R1	AA	71	DA	NC
		10	J	8	H		04	2C	R4	AE	74	DD	NF
		12	F	12	F		SA	34	M2	C1	8A	E3	P3
		14	B	14	B		09	2E	R6	AC	76	DF	NB
M3	1	4	A	4	A		S5	29	RV	AV	7T	D7	N8
	2	4	A	4	A		S5	29	RV	AV	7T	D7	N8
		6	D	6	D		S2	24	RS	AS	7N	D4	N5
		6	G	6	G		S3	28	RU	S4	7R	D6	N7
		10	B	10	B		1N	26	RT	AT	7P	D5	N6
	3	4	A	4	A		S5	29	RV	AV	7T	D7	N8
		6	G	6	G		S3	28	RU	S4	7R	D6	N7
		14	B	14	B		1N	26	RT	AT	7P	D5	N6
CLINCH NUTS WITH EMI SPRINGS (PLUG ONLY)													
#4-40	2	6	G	NA		EMI SPRING	*S6	*30	*RW	AW	7W	D8	N9
		8	F				*S7	*31	*RY	AY	7Y	D9	NZ
		10	B				*SF	*37	*M9	C6	SE	E9	PA
	3	10	J				*S6	*30	*RW	AW	7W	D8	N9
		12	F				*S7	*31	*RY	AY	7Y	D9	NZ
#6-32	1	4	A			EMI SPRINGS	*S8	*32	*RZ	A8	7U	E1	P1
	2	4	A				*S8	*32	*RZ	A8	7U	E1	P1
		6	G				*1M	*22	*RR	S1	7M	D3	N4
		8	F				*1P	*2M	*RF	C3	7B	DN	P5
		10	B				*1B	*2K	*RB	18	79	DL	NM
	3	8	H				*S8	*32	*RZ	A8	7U	E1	P1
		10	J				*1M	*22	*RR	S1	7M	D3	N4
		12	F				*1P	*2M	*RF	C3	7B	DN	P5
		14	B				*1B	*2K	*RB	18	79	DL	NM



Amphenol does not recommend Chem Film plating with EMI springs due to this plating's tendency to scratch and/or flake off during repeated mating cycles.

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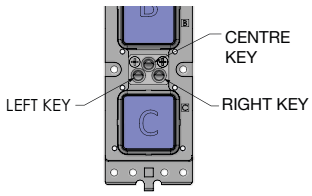
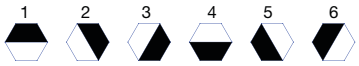
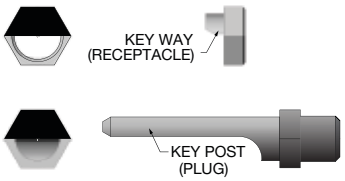


LOCATION OF POLARIZATION KEYS
(view from engaging face)



BLACK AREA REPRESENTS KEY POSITION



PART NUMBER KEY

1. Connector Series	2.Class	3. Shell Style	4. Insert Layout Designator PG 15-21	5. Shell Type	6. Mounting Modifier PG 22-24	7. Polarizing Position PG 25-27	8. Contact Modifier Material
A	D	3	313	3	00	01	OO

	Receptacle Shell			Plug Shell		
Code Part #	Left Post	Center Post	Right Post	Left Post	Center Post	Right Post
00	-	-	-	-	-	-
01	4	4	4	1	1	1
02	4	4	3	2	1	1
03	4	4	2	3	1	1
04	4	4	1	4	1	1
05	4	4	6	5	1	1
06	4	4	5	6	1	1
07	5	4	4	1	1	6
08	5	4	3	2	1	6
09	5	4	2	3	1	6
10	5	4	1	4	1	6
11	5	4	6	5	1	6
12	5	4	5	6	1	6
13	6	4	4	1	1	5
14	6	4	3	2	1	5
15	6	4	2	3	1	5
16	6	4	1	4	1	5
17	6	4	6	5	1	5
18	6	4	5	6	1	5
19	1	4	4	1	1	4
20	1	4	3	2	1	4
21	1	4	2	3	1	4
22	1	4	1	4	1	4
23	1	4	6	5	1	4
24	1	4	5	6	1	4
25	2	4	4	1	1	3
26	2	4	3	2	1	3
27	2	4	2	3	1	3
28	2	4	1	4	1	3
29	2	4	6	5	1	3
30	2	4	5	6	1	3
31	3	4	4	1	1	2
32	3	4	3	2	1	2
33	3	4	2	3	1	2
34	3	4	1	4	1	2
35	3	4	6	5	1	2
36	3	4	5	6	1	2
37	4	3	4	1	2	1
38	4	3	3	2	2	1
39	4	3	2	3	2	1
40	4	3	1	4	2	1
41	4	3	6	5	2	1
42	4	3	5	6	2	1
43	5	3	4	1	2	6
44	5	3	3	2	2	6
45	5	3	2	3	2	6
46	5	3	1	4	2	6
47	5	3	6	5	2	6
48	5	3	5	6	2	6
49	6	3	4	1	2	5

	Receptacle Shell			Plug Shell		
Code Part #	Left Post	Center Post	Right Post	Left Post	Center Post	Right Post
50	6	3	3	2	2	5
51	6	3	2	3	2	5
52	6	3	1	4	2	5
53	6	3	6	5	2	5
54	6	3	5	6	2	5
55	1	3	4	1	2	4
56	1	3	3	2	2	4
57	1	3	2	3	2	4
58	1	3	1	4	2	4
59	1	3	6	5	2	4
60	1	3	5	6	2	4
61	2	3	4	1	2	3
62	2	3	3	2	2	3
63	2	3	2	3	2	3
64	2	3	1	4	2	3
65	2	3	6	5	2	3
66	2	3	5	6	2	3
67	3	3	4	1	2	2
68	3	3	3	2	2	2
69	3	3	2	3	2	2
70	3	3	1	4	2	2
71	3	3	6	5	2	2
72	3	3	5	6	2	2
73	4	2	4	1	3	1
74	4	2	3	2	3	1
75	4	2	2	3	3	1
76	4	2	1	4	3	1
77	4	2	6	5	3	1
78	4	2	5	6	3	1
79	5	2	4	1	3	6
80	5	2	3	2	3	6
81	5	2	2	3	3	6
82	5	2	1	4	3	6
83	5	2	6	5	3	6
84	5	2	5	6	3	6
85	6	2	4	1	3	5
86	6	2	3	2	3	5
87	6	2	2	3	3	5
88	6	2	1	4	3	5
89	6	2	6	5	3	5
90	6	2	5	6	3	5
91	1	2	4	1	3	4
92	1	2	3	2	2	4
93	1	2	2	3	3	4
94	1	2	1	4	3	4
95	1	2	6	5	3	4
96	1	2	5	6	3	4
97	2	2	4	1	3	3
98	2	2	3	2	3	3
99	2	2	2	3	3	3

The following chart lists the polarizing positions of available keying positions.

See how to order procedure of page 6 and 9 for incorporation these polarizing positions into part numbers.

Polarizing Positions

ARINC 600

PART NUMBER KEY

1. Connector Series	2.Class	3. Shell Style	4. Insert Layout Designator PG 15-21	5. Shell Type	6. Mounting Modifier PG 22-24	7. Polarizing Position PG 25-27	8. Contact Modifier Material
A	D	3	313	3	00	A1	OO

The following chart lists the polarizing positions of available keying positions. See how to order procedure of page 6 and 9 for incorporation these polarizing positions into part numbers.

Part Number		Receptacle Shell			Plug Shell		
Code Part #	Refer #	Left Post	Center Post	Right Post	Left Post	Center Post	Right Post
A0	100	2	2	1	4	3	3
A1	101	2	2	6	5	3	3
A2	102	2	2	5	6	3	3
A3	103	3	2	4	1	3	2
A4	104	3	2	3	2	3	2
A5	105	3	2	2	3	3	2
A6	106	3	2	1	4	3	2
A7	107	3	2	6	5	3	2
A8	108	3	2	5	6	3	2
A9	109	4	1	4	1	4	1
B0	110	4	1	3	2	4	1
B1	111	4	1	2	3	4	1
B2	112	4	1	1	4	4	1
B3	113	4	1	6	5	4	1
B4	114	4	1	5	6	4	1
B5	115	5	1	4	1	4	6
B6	116	5	1	3	2	4	6
B7	117	5	1	2	3	4	6
B8	118	5	1	1	4	4	6
B9	119	5	1	6	5	4	6
C0	120	5	1	5	6	4	6
C1	121	6	1	4	1	4	5
C2	122	6	1	3	2	4	5
C3	123	6	1	2	3	4	5
C4	124	6	1	1	4	4	5
C5	125	6	1	6	5	4	5
C6	126	6	1	5	6	4	5
C7	127	1	1	4	1	4	4
C8	128	1	1	3	2	4	4
C9	129	1	1	2	3	4	4
D0	130	1	1	1	4	4	4
D1	131	1	1	6	5	4	4
D2	132	1	1	5	6	4	4
D3	133	2	1	4	1	4	3
D4	134	2	1	3	2	4	3
D5	135	2	1	2	3	4	3
D6	136	2	1	1	4	4	3
D7	137	2	1	6	5	4	3
D8	138	2	1	5	6	4	3
D9	139	3	1	4	1	4	2
E0	140	3	1	3	2	4	2
E1	141	3	1	2	3	4	2
E2	142	3	1	1	4	4	2
E3	143	3	1	6	5	4	2

Part Number		Receptacle Shell			Plug Shell		
Code Part #	Refer #	Left Post	Center Post	Right Post	Left Post	Center Post	Right Post
E4	144	3	1	5	6	4	2
E5	145	4	6	4	1	5	1
E6	146	4	6	3	2	5	1
E7	147	4	6	2	3	5	1
E8	148	4	6	1	4	5	1
E9	149	4	6	6	5	5	1
F0	150	4	6	5	6	5	1
F1	151	5	6	4	1	5	6
F2	152	5	6	3	2	5	6
F3	153	5	6	2	3	5	6
F4	154	5	6	1	4	5	6
F5	155	5	6	6	5	5	6
F6	156	5	6	5	6	5	6
F7	157	6	6	4	1	5	5
F8	158	6	6	3	2	5	5
F9	159	6	6	2	3	5	5
G0	160	6	6	1	4	5	5
G1	161	6	6	6	5	5	5
G2	162	6	6	5	6	5	5
G3	163	1	6	4	1	5	4
G4	164	1	6	3	2	5	4
G5	165	1	6	2	3	5	4
G6	166	1	6	1	4	5	4
G7	167	1	6	6	5	5	4
G8	168	1	6	5	6	5	4
G9	169	2	6	4	1	5	3
H0	170	2	6	3	2	5	3
H1	171	2	6	2	3	5	3
H2	172	2	6	1	4	5	3
H3	173	2	6	6	5	5	3
H4	174	2	6	5	6	5	3
H5	175	3	6	4	1	5	2
H6	176	3	6	3	2	5	2
H7	177	3	6	2	3	5	2
H8	178	3	6	1	4	5	2
H9	179	3	6	6	5	5	2
J0	180	3	6	5	5	5	2
J1	181	4	5	4	1	6	1
J2	182	4	5	3	2	6	1
J3	183	4	5	2	3	6	1
J4	184	4	5	1	4	6	1
J5	185	4	5	6	5	6	1
J6	186	4	5	5	6	6	1
J7	187	5	5	4	1	6	6

PART NUMBER KEY

1. Connector Series	2.Class	3. Shell Style	4. Insert Layout Designator PG 15-21	5. Shell Type	6. Mounting Modifier PG 22-24	7. Polarizing Position PG 25-27	8. Contact Modifier Material
A	D	3	313	3	00	J8	OO

The following chart lists the polarizing positions of available keying positions. See how to order procedure of page 6 and 9 for incorporation these polarizing positions into part numbers.

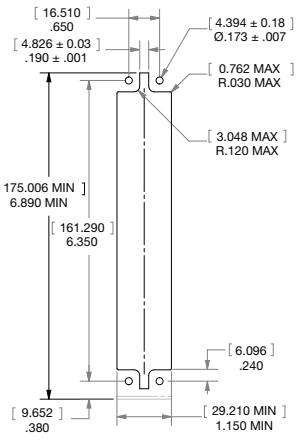
Part Number		Receptacle Shell			Plug Shell		
Code Part #	Refer #	Left Post	Center Post	Right Post	Left Post	Center Post	Right Post
J8	188	5	5	3	2	6	6
J9	189	5	5	2	3	6	6
K0	190	5	5	1	4	6	6
K1	191	5	5	6	5	6	6
K2	192	5	5	5	6	6	6
K3	193	6	5	4	1	6	5
K4	194	6	5	3	2	6	5
K5	195	6	5	2	3	6	5
K6	196	6	5	1	4	6	5
K7	197	6	5	6	5	6	5
K8	198	6	5	5	6	6	5
K9	199	1	5	4	1	6	4
L0	200	1	5	3	2	6	4
L1	201	1	5	2	3	6	4
L2	202	1	5	1	4	6	4
L3	203	1	5	6	5	6	4
L4	204	1	5	5	6	6	4
L5	205	2	5	4	1	6	3
L6	206	2	5	3	2	6	3
L7	207	2	5	2	3	6	3
L8	208	2	5	1	4	6	3
L9	209	2	5	6	5	6	3
M0	210	2	5	5	6	6	3
M1	211	3	5	4	1	6	2
M2	212	3	5	3	2	6	2
M3	213	3	5	2	3	6	2
M4	214	3	5	1	4	6	2
M5	215	3	5	6	5	6	2
M6	216	3	5	5	6	6	2

Panel Cutout

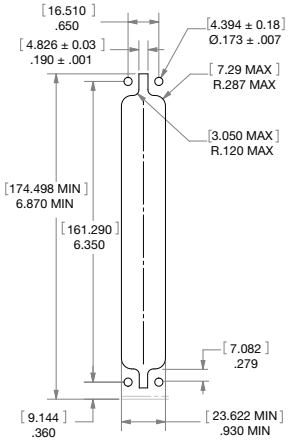
ARINC 600

SIZE 1

SZ 1 - PLUG

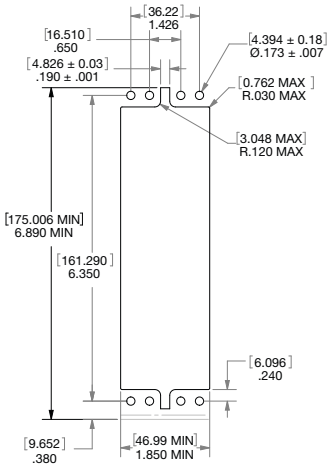


SZ 1 - REC

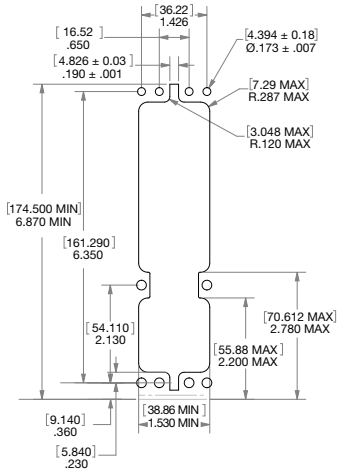


SIZE 2

SZ 2 - PLUG

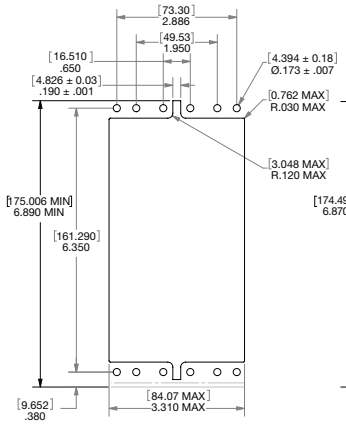


SZ 2 - REC

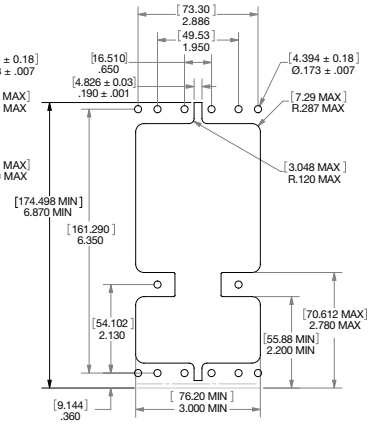


SIZE 3

SZ 3 - PLUG



SZ 3 - REC



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Contacts for Amphenol ARINC 600 Rack and Panel Connectors can be ordered separately. Use part numbers shown in the charts below for ordering contacts and applicable tools. For further information consult Amphenol Canada Corporations

CRIMPED **PIN**

CRIMPED **SOCKET**

CRIMP **CONTACTS**

CONTACT TYPE	SIZE	RECEPTACLE		Plug		Installation/ Removal Tool	Crimp Tool	Positioner	AWG	MAX Insulation Dia.
		TYPE	PART NO.	TYPE	PART NO.					
Signal	22	SOCKET	AC-782222-301	Pin	AC-772222-301	M81969/1-01	M22520/2-01	M22520/2-23	22, 24 & 26	0.052"
Power	20	Pin	AC-772020-302	Socket	AC-782020-302	M81969/1-02	M22520/2-01	M22520/2-08	20, 22 & 24	0.060"
	16		AC-771616-303		AC-781616-303	M81969/1-03	M22520/1-01	M22520/1-02	16, 18 & 20	0.080"
	12		AC-771212-304		AC-781212-304	M81969/28-02	M22520/1-01	M22520/1-11	12 & 14	0.114"

PC TAIL **PIN**

PC TAIL **SOCKET**

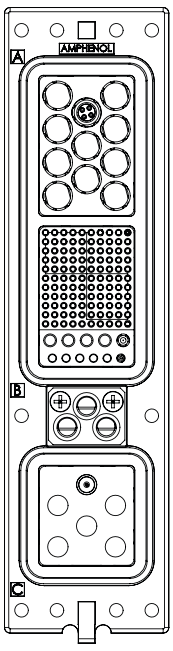
PCB **TAILS FOR SIGNAL AND POWER**

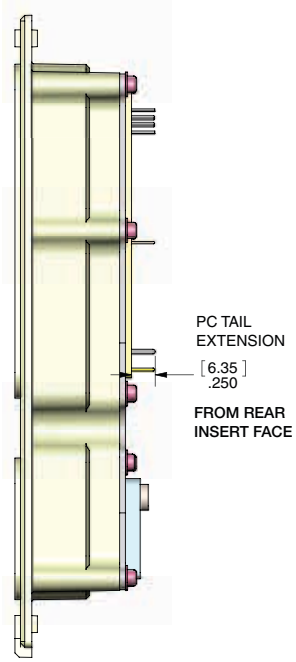
CONTACT TYPE	SIZE	PCB STD DIA ± .002"	RECEPTACLE		PLUG		PC TAIL EXT "XX"				"Z"	PC TAIL DIP
			Type	Part No.	Type	Part No.	0.250"	0.150"	.375"	0.500"		
SIGNAL	22	0.025"	SOCKET	AC-7822XX-801	PIN	AC-7722XX-Z01	00	02	03	04	G = GOLD S = SOLDER T = TIN	
POWER	20	0.032"	PIN	AC-7720XX-Z01	SOCKET	AC-7820XX-801	00	02	03	04		
	16	0.050"		AC-7716XX-Z01		AC-7816XX-801	00	02	03	04		
	12	0.081"		AC-7712XX-Z01		AC-7812XX-801	00	02	06	04		

Receptacles are front release, plugs are rear release

FILLER **PLUGS**

Contact Cavity Size	Amphenol Part Numbers	EMI Electroless Nickel Plated
22	AC-660022-701	AC-660022-E01
20	AC-660020-701	AC-660020-E01
16	AC-660016-701	AC-660016-E01
16 Fiber	AC-660016F-701	AC-660016F-E01
12	AC-660012-701	AC-660012-E01
8 Coax	AC-660008-701	AC-660008-E01
5 Coax (Plug)	AC-660005-701	AC-660005-E01
5 Coax (Recept.)	AC-660004-701	AC-660004-E01





Note: Filler plugs are for non-environmental connectors.

SEALING **PLUGS**

Contact Cavity Size	Amphenol Part Numbers	Color
22	AC-660022-801-2	Black
20	AC-660020-801-2	Red
16	AC-660016-801-2	Green
12	AC-660012-801-2	Orange
8 Coax	AC-660008-801	Red

PC TAIL
SOCKET

PC TAIL
PIN

FRONT **RELEASE PC TAIL CONTACTS FOR COAX, QUADRAX AND TWINAX**

CONTACT TYPE	SIZE	RECEPTACLE		PLUG		PC TAIL EXT "XX"			
		Type	Part No.	Type	Part No.	0.250"	0.150"	.375"	0.500"
COAX	5	PIN	AC-6C05PP01-XX	SOCKET	AC-6C05SP01-XX	00	02	03	04
	8		AC-6C08PP01-XX		AC-6C08SP01-XX	00	02	03	04
QUADRAX	8		AC-6Q08PP01-XX		AC-6Q08SP01-XX	00	02	03	04
TWINAX	8		AC-6T08PP01-XX		AC-6T08SP01-XX	00	02	06	04

For other contact lengths, please contact the factory or Amphenol Canada.

PROTECTIVE **COVERS**

Conductive covers for ARINC 600 connectors can be ordered from charts below. These covers are designed to protect equipment against the risks of electrostatic discharge, and are made of self-extinguishing polyethylene with graphite filler.

Receptacle Conductive Covers		
Shell Size 1	Combination - Signal and Block Cover AC-200000-911	Signal Block Cover only AC-2000000-911A
		Signal Block Cover only AC-2000000-911C
Shell Size 2 & 3	Combination - Signal and Block Cover AC-200000-912	Signal Block Cover only AC-2000000-912A
		Signal Block Cover only AC-2000000-912C

Plug Conductive Covers		
Shell Size 1	Combination - Signal and Block Cover AC-200000-909	Signal Block Cover only AC-2000000-909A
		Signal Block Cover only AC-2000000-909C
Shell Size 2 & 3	Combination - Signal and Block Cover AC-200000-910	Signal Block Cover only AC-2000000-910A
		Signal Block Cover only AC-2000000-910C

TRANSCEIVERS

PROTOCOL	SIZE	TRANSMITTING PIN	RECEIVING PIN
801	8	AC-6A08PP01-01	AC-6B08PP01-01
ELIO		AC-6A08PP02-01	AC-6B08PP02-01

To order separate waveguides for ARINC 600 Connectors, consult Amphenol Canada Corporation

TYPE	SIZE	RECEPTACLE		PLUG		CABLE TYPE	TECHNICAL NOTES					"X" = BOOT TYPE
		Type	Part No.	Type	Part No.		Inner Crimp	Positioner	Outer	Die	Removal Tool	
RF	1	COAX PIN	AC-6C01PC01-01	Coax Socket	AC-6C01SC01-01	RG214 & RG393	NA	NA	NA	NA	NA	A = Non-Enviro w/Alignment Boot N = Non-Enviro w/o Alignment Boot (NO BOOT) E = Enviro w/ Sealing & Alignment Boot T = Enviro for Tight Spacing w/ Sealing & Alignment Boot B = Enviro for Sealing to the insert w/o Grommet w/ Sealing Boot
	5		AC-6C05PC01-01X		AC-6C05SC01-01X	RG142, RG400	M22520/2-01	"K345 SETTING 8 (RG142) SETTING 6 (RG400)"	M22520/5-01	M22520/5-05	M81969/28-01	
			AC-6C05PC01-02X		AC-6C05SC01-02X	RG58/U		"K345 SETTING 5"	M22520/5-01	"Y586 SETTING B"		
			AC-6C05PC01-03X		AC-6C05SC01-03X	RD174, RG179, RG316		"K345 SETTING 5 or 6"	M22520/5-01	M22520/5-05		
	8		AC-6C08PC01-01X		AC-6C08SC01-01X	RG179	M22520/2-01	"K345 SETTING 7"	M22520/5-01	"M22520/5-05 HEX B (.178 FLATS)"	"M81969/29-2 (or 485-952)"	
	8	Quadrax Pin	AC-6Q08PC01-01X	Quadrax Socket	AC-6Q08SC01-01X	"DRAKA FILICA F4703-3 & F4704-4, NEXANS FILOTEK ABS1503KD24/ ET2PF870"	M22520/2-01	"K709 SETTING 5"	M22520/5-01	"M22520/5-45 SETTING B"	485-952	
			AC-6Q08PC01-02X		AC-6Q08SC01-02X	TENSOLITE NF24Q100, 24443/03130X-4(LD), 24443/9P025X-4(LD), BOEING S280W502-4						
			AC-6Q08PC01-03X		AC-6Q08SC01-03X	"TENSOLITE 26743102006X-4(LD) or GORE RCN8328"				"M22520/5-45 SETTING A"		
	8	Twinax Pin	AC-6T08PC01-01X	Twinax Socket	AC-6T08SC01-01X	TENSOLITE 24463/9P025X-2(LD)	AFM-2	"K1168 SETTING 6"	M22520/5-01	"Y586 SETTING B"	M81969/28-03	
			AC-6T08PC01-02X		AC-6T08SC01-02X	GORE GSC-12-2548-00						
			AC-6T08PC01-03X		AC-6T08SC01-03X	GRUMMAN GC875TM24H						

Backshell
How to Order

1. Connector Series	2. Backshell	3. Shell Style	4. Backshell Style	5. Plating	6. Customer Number
600	B	4	B	1	XXX

1. CONNECTOR SERIES	
600	ARINC 600
404	ARINC 404
R39	
R27	

2. BACK SHELL	
B	Backshell

3. SHELL STYLE	
1	Size
2	Size
3	Size

4. BACKSHELL STYLE	
A	Split, Saddle Clamp
B	Split, EMI
C	One Piece, Sealed, EMI
D	One Piece, Saddle Clamp

5. PLATING	
1	Electroless Nickel
2	OD Chromate
3	Tin
4	Gold
5	Zinc Nickel
6	Yellow CAD
7	Chem Film
8	Nickel Fluorocarbon Polymer (Durmalon)

6. CUSTOMER NUMBER	
XXX	Customer Number

FILTER CONNECTOR DESIGN

Filter connectors have been used for over thirty years to provide cost and space effective solutions to EMI problems in a wide range of military and commercial applications including avionics systems, satellites, missiles, communications, control systems and tempest equipment. A low pass filter connector incorporates capacitors and/or ferrite inductors into the connector body. The two capacitor types commonly used in filter connectors for military or avionics applications are planar arrays and tubular capacitors. Each of these capacitor types is an efficient filter at high frequencies (Up to 1GHz) and has been proven to be extremely reliable when suitably assembled into a connector. Both planar and tubular designs feature Amphenol's unique solder-less construction which reduces stress on the ceramic elements and results in superior physical and thermal shock capabilities.

CAPACITOR TYPES

PLANAR ARRAY DESIGN

Amphenol Canada's planar design consists of planar ceramic capacitor arrays with optional ferrites assembled concentrically over the contacts and into the connector shell. The planars are compressed between rubber gaskets and have contact springs in each position which form a stress isolated connection with the contact body. The planars are grounded to the shell via a ground spring.

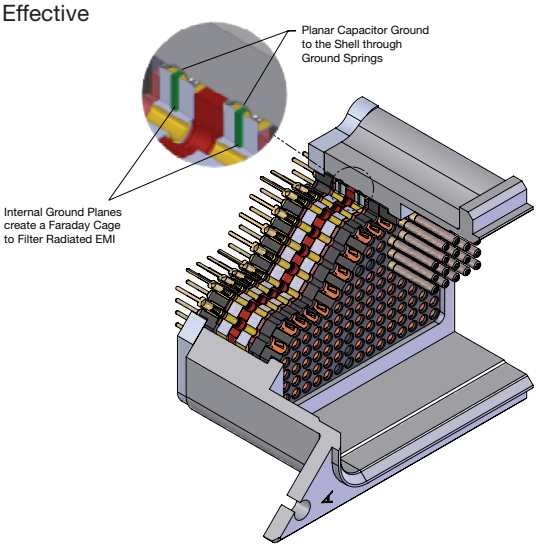
TUBULAR DESIGN

Amphenol Canada's tubular design consists of a ceramic tubular capacitor assembled onto a machined contact. The filter tube is connected to the contact with conductive rubber washers to provide a stress-isolated contact assembly. Grounding is achieved via a ground plate.

WHY USE AN ACC FILTER CONNECTOR

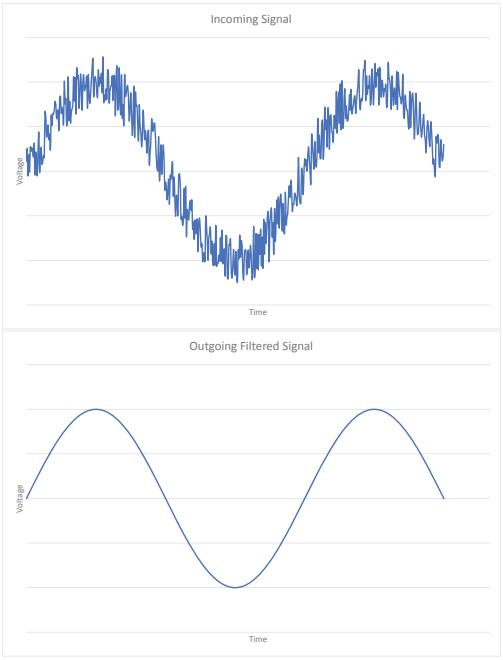
ACC uses a stress-isolated planar array utilizing retention clips instead of solder to electrically connect the planar to the contacts. This provides a more robust and durable design with respect to the typical shock and vibration of aerospace applications. Stress-isolated planar arrays out performs discrete filters by blocking out the radiated EMI as well as filtering out conducted EMI. The ground plate of a tubular design or the internal ground electrodes of a planar design are connected to the shell with minimal aperture size and present an effective barrier to radiated EMI passing through the insert cavity.

- Fewer components = Cost Effective
- Space Saving on the PCB
- Increased Reliability (Solder-less Designs)
- For retrofit applications or late design-in
- Effective against radiated and conducted EMI



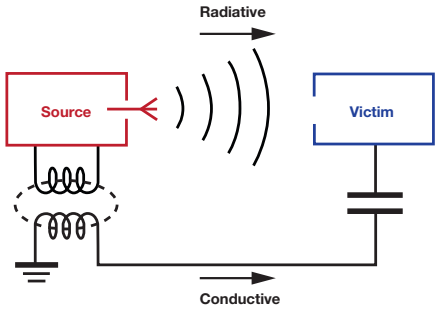
WHAT DOES A FILTER CONNECTOR DO?

A filtered connector filters out noise and cleans a signal through a low pass filter. They allow low frequency signals to pass through, but filter out the higher frequency signals noise/EMI.



ELECTROMAGNET INTERFERENCE (EMI) TYPES: CONDUCTED & RADIATED

Once in a system, EMI can distort signals and can interfere with system functionality. EMI can get into the system through conduction or radiation. Conducted EMI travels through the physically connected lines caused by other electronic devices in the system. Radiated EMI travels through air waves and can affect physically isolated lines.



FILTER CONNECTOR SELECTION

Selection of a particular filter circuit will depend on the required insertion loss characteristics and the system source and load impedances. By arranging the capacitor and ferrites in a variety of combinations a number of equivalent circuits may be attained. The ferrite elements always face the low impedance side of the filter. These filter types are available in a wide range of capacitance and voltage values and may be selected in virtually any combination within the connector insert. In addition to filter contacts, isolated contacts and ground contacts are available.

The following factors may affect the filter performance, and should be considered when selecting a filter connector and Amphenol Canada takes these into account when designing your filter solution.

FILTER CONNECTOR PARAMETERS

Operating/working voltage is specified for the normal signal line voltage. Dielectric Withstanding Voltage (DWV) is specified for the transient voltage surges.

Operating currents cause magnetic saturation of inductive elements (ferrites). Therefore filters with ferrite inductors (Pi, CL, LC and T) will perform much like C filters as the ferrite approaches saturation. The saturation point can vary by ferrite characteristics and size but typically occurs above 0.1 A. The DC current rating through the contact is much higher and only depends on the contact size.

Capacitance and filters can operate between -55˚C to +125˚C; however, the performance can degrade with changes in the temperature. Capacitance and insertion loss performance are shown at 25˚C. The typical high capacitance (>500pF) dielectric (X7R) has temperature coefficients of ±15% from -55˚C to +125˚C. The typical low capacitance (<500pF) dielectric (C0G) has a negligible temperature coefficients of ±0.3% from -55˚C to +125˚C.

Additional transient voltage suppression requirements such as lightning strikes may necessitate the addition of diodes or MOV's to the PCB or in the connector.

CAPACITOR FILTER (C)

- 20 dB per Frequency Decade Typical Increase in Attenuation Slope
- Used mainly for High Frequency Noise
- With High Source and Load Impedance

L FILTER (L-C)

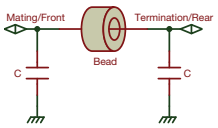
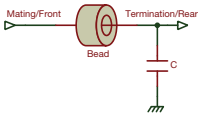
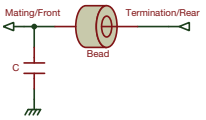
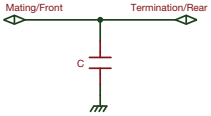
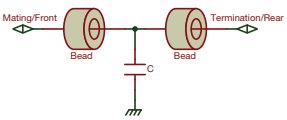
- 20 dB per Frequency Decade Typical Increase in Attenuation Slope
- Used where Source and Load Impedance are Dissimilar
- Ferrite Side of Filter is Connected to Lower Impedance Side of Circuit
- Capacitor Side to Higher Impedance Side

PI FILTER (C-L-C)

- 40 dB per Frequency Decade Typical Increase in Attenuation Slope
- Used where Applications Contain Relatively Higher Source and Load Impedance

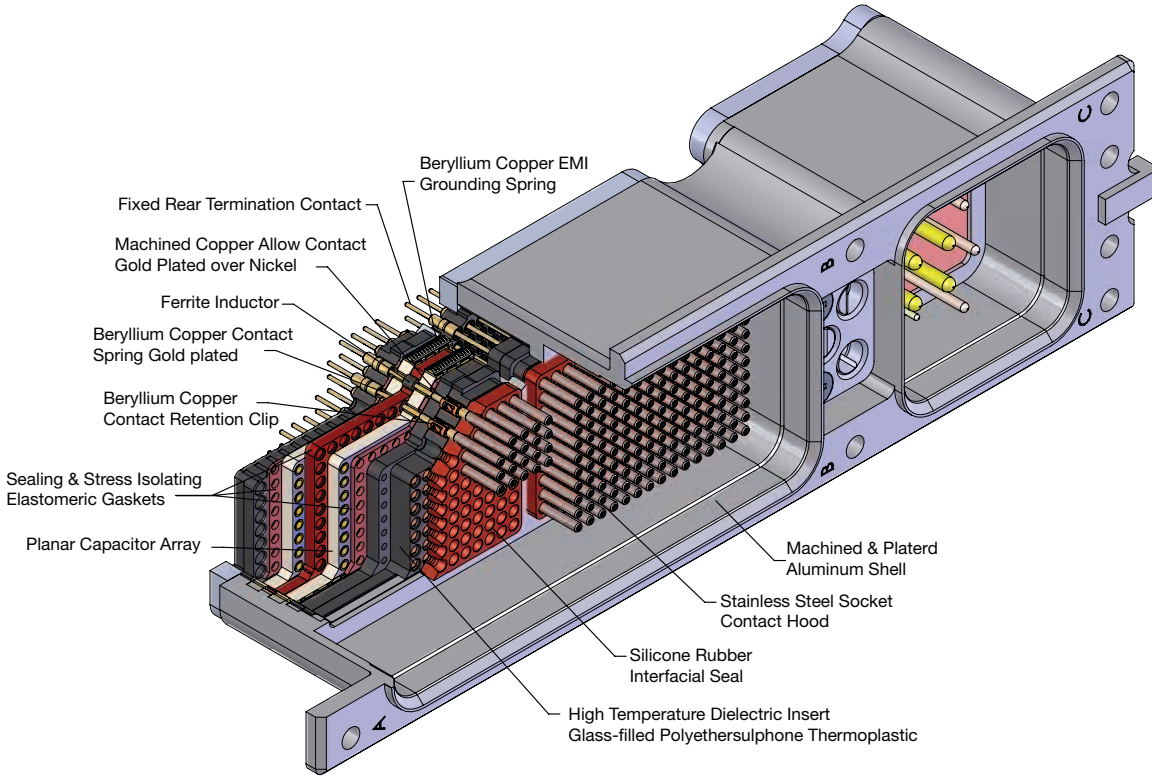
T FILTER (L-C-L)

- 20 dB per Frequency Decade Typical Increase in Attenuation Slope
- Used where Applications Contain Low Source and Load Impedance
- Switch-mode Power Supplies are Typical Applications

FILTER TYPES	FILTER CIRCUIT	BEST FILTERING APPLICATION
PI		Unknown or medium source and load Impedance
LC		Low impedance on mating side, high impedance on termination side
CL		High impedance on mating side, low impedance on termination side
C		High source and high load impedance
T		Low source and low load impedance

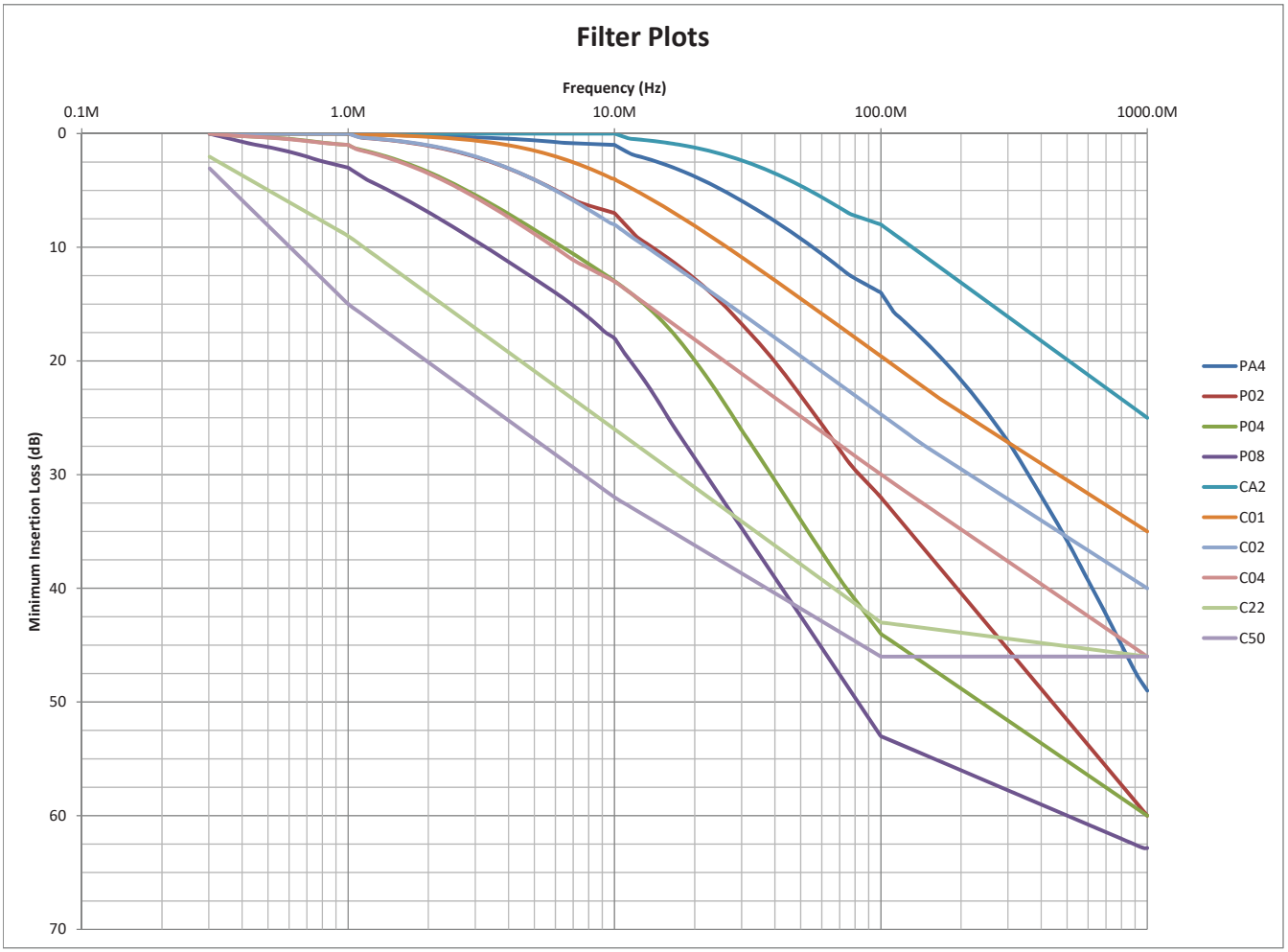
High source or load impedance >100ohms

Low source or load impedance >10ohms



TYPE		PI				C, LC, CL, T					
FILTER		PA4	P02	P04	P08	CA2	C01	C02	C04	C22	C50
Capacitance		400-800 pF	1.8-3.6 nF	4-8 nF	8-16 nF	200-400 pF	0.9-1.8 nF	1.8-3.6 nF	4-8 nF	22-40 nF	50-100 nF
Insertion Loss (dB)	300 KHz	-	-	-	-	-	-	-	-	2	3
	1 MHz	-	-	1	3	-	-	-	1	9	15
	10 MHz	1	7	13	18	-	4	8	13	26	32
	100 MHz	14	32	44	53	8	20	25	30	43	46
	1 GHz	49	60	60	63	25	35	40	46	46	46
Working voltage (VDC) (@ 25° & sea level)		200									
Dielectric Withstand voltage (VDC) (@ 25°C & 50 mA max charging current)		500									
Insulation Resistance (Gohms) (min) (@ 25°C & working voltage)		10									
Current Rating by Contact Size (continuous max, DC amperes)		#22 = 5 Amps #20 = 7.5 Amps #16 = 13 Amps #12 = 23 Amps									
Dissipation Factor @ 1kHz		3% Max									

Note: Other capacitance values, mixed capacitance arrangements, ground and isolated contacts are available. Consult the factory for your particular applications.
*Acceptance testing performance to 1 G Hz maximum


Filter Plots
Frequency (Hz)
0.1M
1.0M
10.0M
100.0M
1000.0M
Minimum Insertion Loss (dB)
0
10
20
30
40
50
60
70
PA4
P02
P04
P08
CA2
C01
C02
C04
C22
C50

PART NUMBER KEY

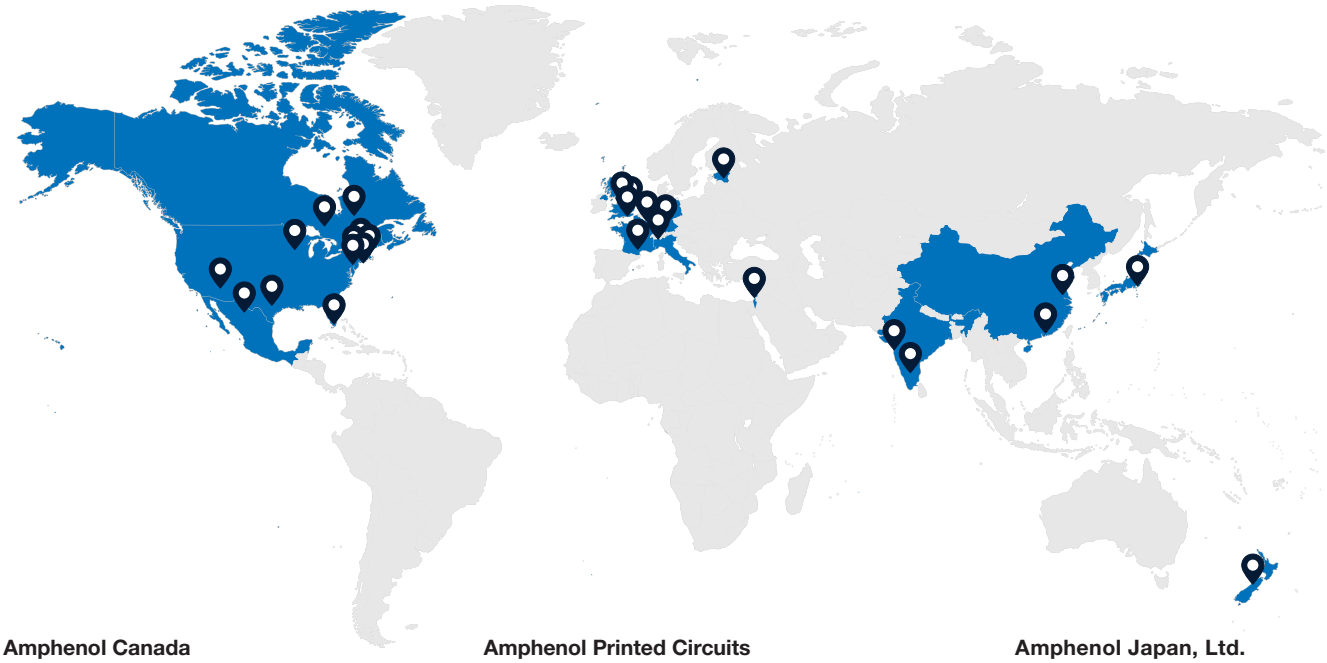
1. Filter	2. Series	3. Class	4. Shell Style	5. Termination Style	6. Connector Size	7. Polarizing Position	8. Customer Number
485-	6	1	A	B	1	00	XXX

STEPS	PART #	DESCRIPTION
1. FILTER	485-	Filter Connector
2. CONNECTOR SERIES	6	ARINC 600
3. CLASS	1	Unsealed
	2	Sealed
4. SHELL STYLE	A	Adapter
	P	Plug
	R	Receptacle
5. TERMINATION STYLE	B	PCB
	S	Solder Cup
	T	Crimp
6. CONNECTOR SIZE	1	Size 1
	2	Size 2
	3	Size 3
8. POLARIZING POSITION	00-	N/A
	01-M6-	Per ARINC Specs
9. CUSTOMER NUMBER	XXX	

Notes

Notes

Amphenol



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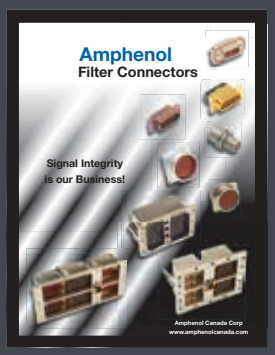

Filter Connectors Catalog

Rectangular Catalog

Microminiature Catalog

R27 Catalog

ARINC 404 Catalog

MMA Catalog

Visit http://www.amphenolcanada.com/media
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