

COAX CONTACT SERIES

Size 8 Coax - 75 Ohm Contacts

PDM 16 Series (75 Ohm)

| | |
|---|---------|
| Specifications / Interface Drawings | 125 |
| Product Data | 126-128 |

PDM ECOAX® 16S Series (75 Ohm, Stamped and Formed)

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| Specifications / Interface Drawings / Product Data | 129 |
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PDM 16 SERIES – 75 OHM

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

MECHANICAL

MATERIALS

Plug Bodies: Brass per ASTM B 16.
 Receptacle Bodies: Beryllium Copper per ASTM B 196.
 Insulation: Teflon (PTFE) per ASTM D 1457.
 Contacts, Female: Beryllium Copper per ASTM B 196.
 Contacts, Male: Brass per ASTM B 16.
 Retaining Ring: Beryllium Copper per ASTM B 194.

PLATING

Gold per MIL-G-45204.
 Copper per MIL-C-14550.
 Nickel per QQ-N-290.

FINISH (Add letter to end of part number.)

BODIES AND CONTACTS*

"A": .000050 Min. Gold over Nickel.
 "B": .000030 Min. Gold over Nickel.
 "C": .000050 Min. Gold over Copper.
 "D": .000030 Min. Gold over Copper.
 **"F": .000010 Min. Gold over Nickel

MATING CHARACTERISTICS

Outer Bodies: 3 lbs. Max. Insertion.
 2 oz. Min. Withdrawal.
 Center Contacts: 16 oz. Max. Insertion.
 .5 oz. Min. Withdrawal.
 Housing Retention: 12 lbs. Min.

ELECTRICAL

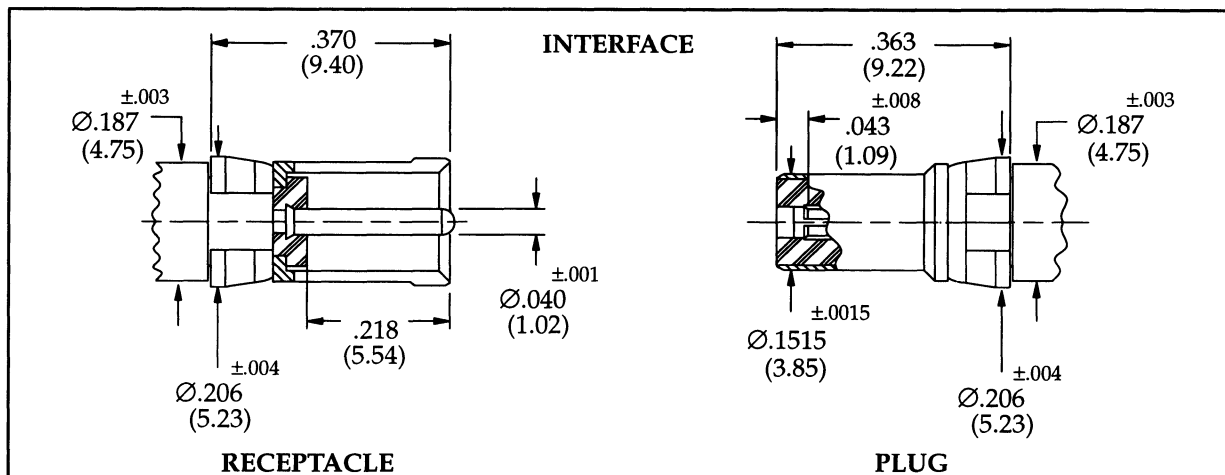
Frequency Range: DC To 2000 MHz.
 Voltage Rating Straight: 1000 V RMS.
 Voltage Rating Angled: 800 V RMS.
 Current Rating: 3.5 Amps.

Contact Resistance: Center Contact 5 Milliohms.
 Contact Resistance: Outer Contact 3 Milliohms.
 Insertion Loss: .5 dB Max.
 Insulation Resistance: 3000 Megohms Min.
 DWV – See detailed chart located in Appendix A.

ENVIRONMENTAL

Operating Temperature Range: -67° F to +257° F.
 (-55° C to +125° C)
 Vibration: MIL-STD-1344, Method 2005, Test Condition 4.
 Shock: MIL-STD-1344, Method 2004, Test Condition E.

Salt Spray: MIL-STD-1344, Method 1001, Condition B.
 Durability: 500 Cycles.



* All other components plated to meet environmental requirements.
 **"F" Plating may not meet all aspects of Environmental Specifications.



PDM 16 SERIES SOLDER

| Part Number | A MAX. | B REF. | C DIA. | Cable |
|---------------|-----------------|-----------------|----------------|-------|
| 16-0020-0670* | .739 (18.77) | .929 (23.60) | .067 (1.70) | RG179 |

Straight Plug

Solder

| Part Number | A MAX. | B REF. | C DIA. | Cable |
|---------------|-----------------|-----------------|----------------|-------|
| 16-1020-0670* | .739 (18.77) | .929 (23.60) | .067 (1.70) | RG179 |

Straight Receptacle

Solder

| Part Number | A MAX. | B REF. | C DIA. | D REF. | Cable |
|---------------|-----------------|-----------------|----------------|-----------------|-------|
| 16-0520-0670* | .530 (13.46) | .734 (18.64) | .067 (1.70) | .492 (12.50) | RG179 |

Right Angle Plug

Solder

| Part Number | A MAX. | B REF. | C DIA. | D REF. | Cable |
|---------------|-----------------|-----------------|----------------|-----------------|-------|
| 16-1520-0670* | .530 (13.46) | .734 (18.64) | .067 (1.70) | .492 (12.50) | RG179 |

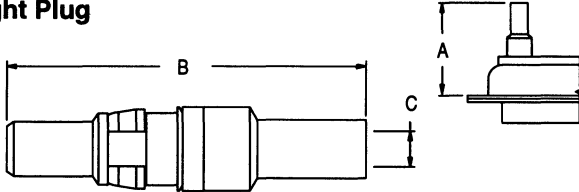
Right Angle Receptacle

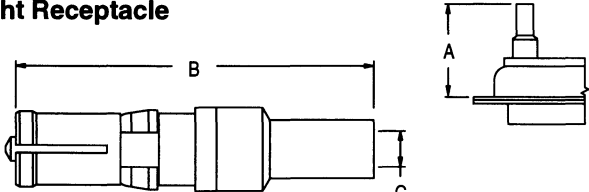
Solder

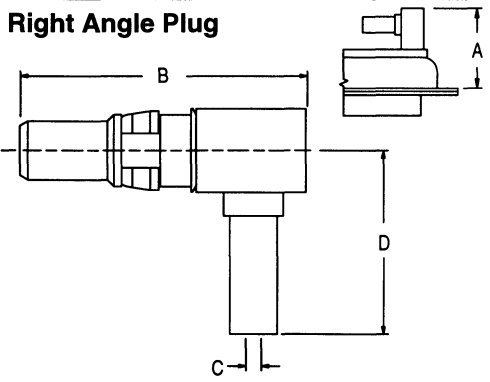
*See Specification Page for finish suffix.

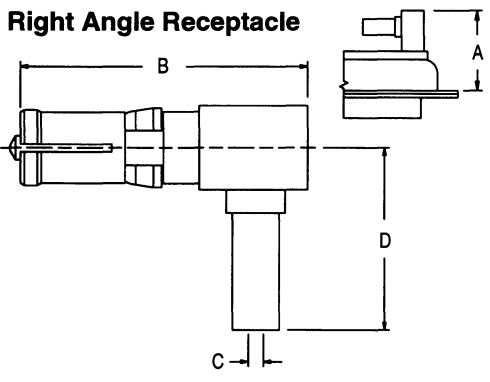


PDM 16 SERIES CRIMP

| Part Number | A MAX. | B REF. | C DIA. | Cable |
|---|-----------------|-----------------|----------------|-------|
| 16-0080-0670* | .739 (18.77) | .929 (23.60) | .067 (1.70) | RG179 |
| Straight Plug  | | | | |
| Crimp Consult Factory For Tooling Information. | | | | |

| Part Number | A MAX. | B REF. | C DIA. | Cable |
|--|-----------------|-----------------|----------------|-------|
| 16-1080-0670* | .739 (18.77) | .929 (23.60) | .067 (1.70) | RG179 |
| Straight Receptacle  | | | | |
| Crimp Consult Factory For Tooling Information. | | | | |

| Part Number | A MAX. | B REF. | C REF. | D DIA. | Cable |
|---|-----------------|-----------------|----------------|-----------------|-------|
| 16-0580-0670* | .530 (13.46) | .734 (18.64) | .067 (1.70) | .492 (12.50) | RG179 |
| Right Angle Plug  | | | | | |
| Crimp Consult Factory For Tooling Information. | | | | | |

| Part Number | A MAX. | B REF. | C REF. | D DIA. | Cable |
|--|-----------------|-----------------|----------------|-----------------|-------|
| 16-1580-0670* | .530 (13.46) | .734 (18.64) | .067 (1.70) | .492 (12.50) | RG179 |
| Right Angle Receptacle  | | | | | |
| Crimp Consult Factory For Tooling Information. | | | | | |

*See Specification Page for finish suffix.



PDM 16 SERIES DOUBLE CRIMP

Phoenix double crimp, size 8 contacts are offered in standard, 50 and 75 ohm versions, as solderless, cost effective alternatives for high volume manufacturing needs. The double crimp contact design consists of a one piece body, a separate snap fit, center contact and an outer ferrule. Both center contact and outer ferrule can be terminated with a high speed crimping operation or conventional hand-held tool. Phoenix double crimp contacts are intermateable to "industry standard" equivalent, D-subminiature coaxial contact varieties.

| Part Number | Cable | A MAX. | |
|---------------|-------|-----------------|--------------------------------|
| 16-0090-0675* | RG179 | .739 (18.77) | Straight Plug |
| | | | Double Crimp |
| Part Number | Cable | A MAX. | |
| 16-1090-0673* | RG179 | .739 (18.77) | Straight Receptacle |
| | | | Double Crimp |

*See Specification Page for finish suffix.



ECOAX[®] 16S SERIES STAMPED AND FORMED CONTACTS

Manufactured Under U.S. Patent
Numbers: 5,055,068 and 5,060,373

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

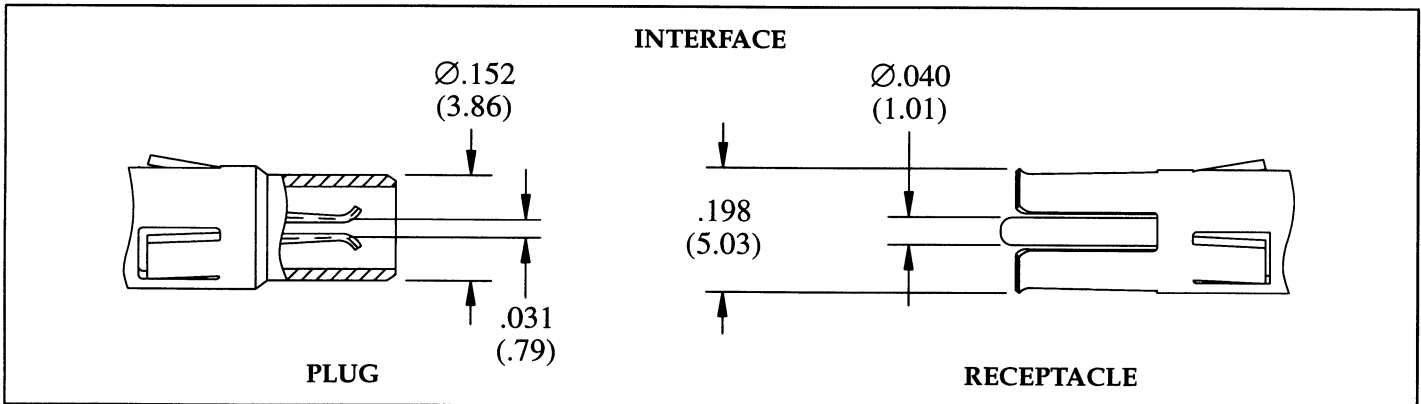
ELECTRICAL SPECIFICATIONS

Coaxial Cable used for Specification M17/113-RG316 Revision F.
Frequency Range: DC to 2 GHz.
VSWR (Mated Pair): 1.25 : 1 Max.
Insertion Loss: 0.1 dB Max.
RF Leakage: 30 dB Min.
Impedance (Nominal): 75 Ohms.

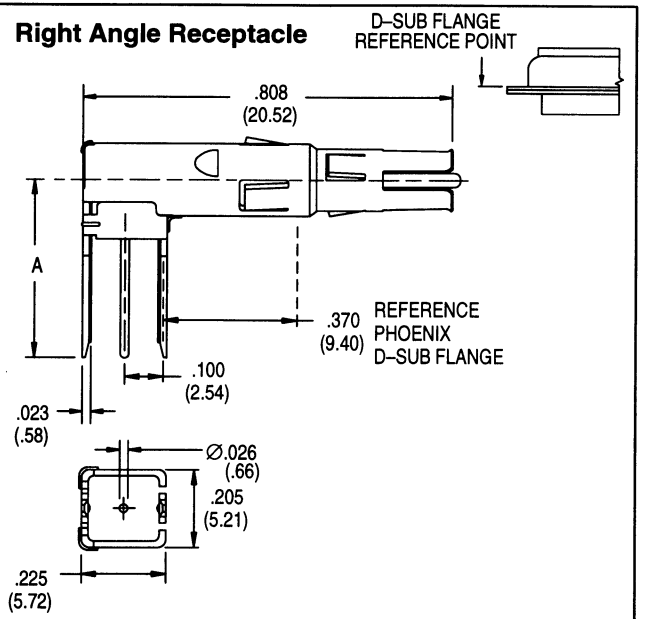
Operating Voltage: 900 V RMS.
DWV (5 mA Max. Leakage Current): 2000 V RMS.
Contact Resistance (1A Current):
Outer Conductor: 5 Milliohms Max.
Center Contact: 5 Milliohms Max.
Insulation Resistance (500 VDC): 5 Gigaohms Min.

FINISH

"B" - .000030 Min. Gold over Nickel.



| Part Number | Style | A | Fits Shell |
|-------------|------------------------|-----------------|------------|
| 16S-3450-03 | Right Angle Receptacle | .400 (10.16) | E,A,B,C |
| 16S-2450-01 | Right Angle Plug | .350 (8.89) | E,A,B,C |
| 16S-1450-01 | Straight Receptacle | N/A | E,A,B,C,D |



THE PHOENIX COMPANY
of CHICAGO, INC.

Dimensions are subject to change without notice.

PALCO CONNECTOR

A subsidiary of The Phoenix Company

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