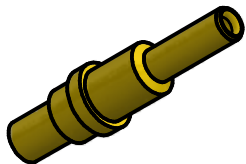


Notes:

168-0020-0860C

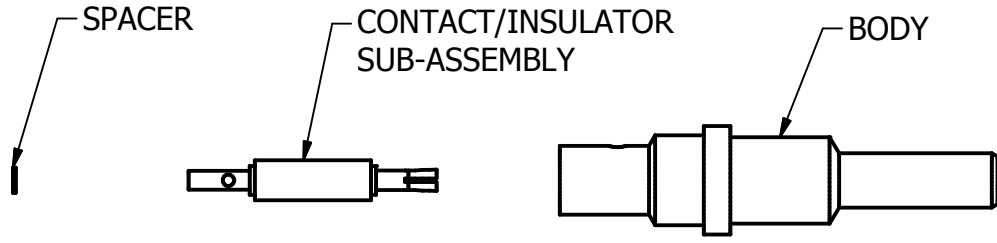
- 1) Design and Interface per IDS 168.
- 2) Blindmate RF/Microwave Contact for ARINC 600 Connectors.
- 3) Size 12 PkZ®, 50 Ohm, 40 GHz Straight Plug, Without Gasket.
- 4) Direct Solder to RG-405 Cable (M17/133) .086 S.R.
- 5) For Use in ARINC 600 Connectors.
- 6) Spacer and Contact/Insulator Sub-Assembly Supplied Loose.
- 7) .000050" Min. Gold Over Copper.



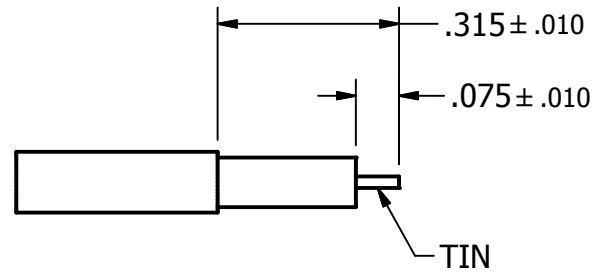
| MATERIAL: | | | | <small>UNLESS OTHERWISE SPECIFIED, PALCO WORKMANSHIP STANDARDS APPLY. DIMENSIONS IN INCHES OR (METRIC).</small> <small>DO NOT SCALE PRINTS</small> <small>TOLERANCES ARE: FRACTIONS: ± 1/64 DECIMALS: .XX ± .01 .XXX ± .005 ANGLES: ± 1/2°</small> | <table border="1"> <tr> <th>APPROVALS</th> <th>DATE</th> </tr> <tr> <td>DRAWN JEM</td> <td>08/10/15</td> </tr> <tr> <td>CHECKED R.M.B.</td> <td>08/10/15</td> </tr> <tr> <td>QA</td> <td></td> </tr> <tr> <td>MFG</td> <td></td> </tr> <tr> <td>ENGINEER J. Maturo</td> <td>08/10/15</td> </tr> <tr> <td>APPROVED R.M.B.</td> <td>08/10/15</td> </tr> </table> | | APPROVALS | DATE | DRAWN JEM | 08/10/15 | CHECKED R.M.B. | 08/10/15 | QA | | MFG | | ENGINEER J. Maturo | 08/10/15 | APPROVED R.M.B. | 08/10/15 | <p>PALCO CONNECTOR 22 GREAT HILL RD., NAUGATUCK, CT 06770</p> | |
|-----------------------|--------------------|-----------|------|--|--|---------------|-----------|--------------|--------------|----------|-------------------|----------|----|--|-----|--|-----------------------|----------|--------------------|----------|--|--|
| APPROVALS | DATE | | | | | | | | | | | | | | | | | | | | | |
| DRAWN JEM | 08/10/15 | | | | | | | | | | | | | | | | | | | | | |
| CHECKED R.M.B. | 08/10/15 | | | | | | | | | | | | | | | | | | | | | |
| QA | | | | | | | | | | | | | | | | | | | | | | |
| MFG | | | | | | | | | | | | | | | | | | | | | | |
| ENGINEER J. Maturo | 08/10/15 | | | | | | | | | | | | | | | | | | | | | |
| APPROVED R.M.B. | 08/10/15 | | | | | | | | | | | | | | | | | | | | | |
| | | | | <p>TITLE SIZE 12 PkZ PLUG DIRECT SOLDER</p> | | | | | | | | | | | | | | | | | | |
| A | REL. PER ECN 12197 | 8/12/2015 | RMB | SIZE | FSCM | DWG NO | REV | PLATING OPT. | | | | | | | | | | | | | | |
| 01 | PRELIMINARY | 8/10/2015 | RMB | A | 58167 | 168-0020-0860 | A | A, C | | | | | | | | | | | | | | |
| REV. | DESCRIPTION | DATE | APPR | SCALE | F.S.R. # | SHEET 1 OF 1 | | | | | | | | | | | | | | | | |

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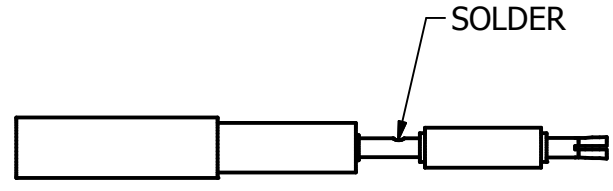


Step 1 (for Flex style cable only)
 Dip end of cable into flux and then tip dip cable to $.30 \pm .02$ " using 63/37 solder and solder pot @ $500 \pm 25^\circ\text{F}$ for six second max.

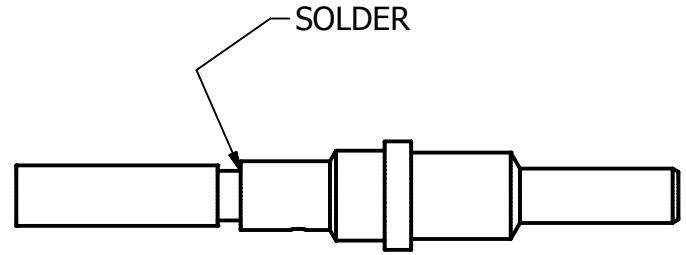


Step 2
 Trim cable to dimensions shown, ($.315 \pm$ dimension for jacketed cables only). Tin center conductor.

Step 3
 Install spacer and contact/insulator sub-assembly onto cable center conductor and solder as shown. Clean solder joint.



Step 4
 Install cable into body until cable bottoms in body. Solder body to cable as shown. Clean solder joint.



CAD DRAWING - NO MANUAL REVISIONS
 filename: \\Palcod\BigBoy\Drawings from server2\Autodesk Inventor Data Base Assemblies\168 Series\168-0020-0860-CAP.ipt

| | | | | | | | | | |
|------------------|--------------------|-----------|-------|---|-------|---|---------------|---|--------------|
| MATERIAL: | | | | UNLESS OTHERWISE SPECIFIED, PALCO WORKMANSHIP STANDARDS APPLY. DIMENSIONS IN INCHES OR (METRIC) DO NOT SCALE PRINTS TOLERANCES ARE: FRACTIONS: $\pm 1/64$ DECIMALS: $.XX \pm .01$ $.XXX \pm .005$ ANGLES: $\pm 1/2^\circ$ | | APPROVALS DRAWN: JEM 08/10/15 CHECKED: R.M.B. 08/10/15 QA: MFG: ENGINEER: J. Maturo 08/10/15 APPROVED: R.M.B. 08/10/15 | | PALCO CONNECTOR 22 GREAT HILL RD., NAUGATUCK, CT 06770 TITLE: CABLE ASSEMBLY PROCEDURE FOR 168-0020-0860 | |
| A | REL. PER ECN 12197 | 8/12/2015 | RMB | | SIZE | FSCM | DWG NO | REV | PLATING OPT. |
| 01 | PRELIMINARY | 8/10/2015 | RMB | | A | 58167 | 168-0020-0860 | A | |
| REV. | DESCRIPTION | DATE | APPR. | | SCALE | F.S.R. # | SHEET 1 OF 1 | | |

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1

| | |
|----------------------|----------------|
| DESIGN SPECIFICATION | |
| IDS-168 | |
| PAGE 1 OF 1 | DATE: 08/12/15 |
| DRAWN: JEM | APPROVED: RMB |

PALEO
CONNECTOR

22 GREAT HILL ROAD, NAUGATUCK, CT. 06770
PHONE: (203) 729-9090 FAX: (203) 723-1794

| REV | DESCRIPTION | DATE | APPR |
|-----|---------------|----------|------|
| A | PER ECN 12197 | 08/12/15 | RMB |
| | | | |
| | | | |
| | | | |

DESCRIPTION: 168 SERIES PKZ®, SIZE 12 MICROWAVE CONTACTS FOR ARINC 600 CONNECTORS

U.S. PATENT No. 4,917,630

JAPANESE PATENT No. 1769278

MECHANICAL

| | |
|--|---|
| MATERIALS | |
| BODIES: | |
| PLUG BODIES - BRASS PER ASTM B 16. | INSULATORS - TEFLON (PTFE) PER ASTM D 1457. |
| RECEPTACLE BODIES - BRASS PER ASTM B 16. | MALE CONTACT - BERYLLIUM COPPER PER ASTM B 196 or BRASS PER ASTM B 16. |
| PLATING: | FEMALE CONTACTS - BERYLLIUM COPPER PER ASTM B 196. |
| GOLD PER MIL-G-45204. | |
| COPPER PER MIL-C-14550. | |
| NICKEL PER QQ-N-290. | |

FINISHES (ADD LETTER TO END OF PART NUMBER)

| |
|--|
| BODIES AND CONTACTS - |
| "A" - .000050 MIN. GOLD OVER NICKEL. |
| "C" - .000050 MIN. COPPER OVER NICKEL. |
| OTHER METAL PARTS: PLATED TO MEET THE ENVIRONMENTAL REQUIREMENTS. |

MATING CHARACTERISTICS

| | |
|------------------------------|---|
| OUTER BODIES _____ | 1.5 LBS MAX. INSERTION. 2 OZ. MIN. WITHDRAW. |
| CENTER CONTACTS _____ | 14 OZ. MAX. INSERTION. .5 OZ. MIN. WITHDRAWAL. |
| HOUSING RETENTION _____ | 12 LBS. MIN. |
| AXIAL MATING TOLERANCE _____ | .070 |

ELECTRICALS

| | |
|---|--|
| FREQUENCY RANGE: DC TO 40 GHz. | CONTACT RESISTANCE: CENTER CONTACT 6 MILLIOHMS |
| VOLTAGE RATING STRAIGHT: 800 VRMS. | CONTACT RESISTANCE: OUTER CONTACT 4 MILLIOHMS |
| VOLTAGE RATING ANGLED: 600 VRMS. | VSWR: CONFIGURATION DEPENDENT. |
| CURRENT RATING: 1.5 AMPS. | R.F. LEAKAGE: -90 dB MIN. @ 2-3 GHz. |
| INSULATION RESISTANCE: 2000 MEGOHMS MIN. | |
| INSERTION LOSS: $.06 \sqrt{f(\text{GHz})}$ dB | |

ENVIRONMENTAL

| | |
|---|---|
| OPERATING TEMPERATURE: -55°C to +165°C | THERMAL SHOCK: MIL-STD-202, METHOD 107, TEST CONDITION B, EXCEPT HIGH TEMPERATURE SHALL BE +85°C. |
| VIBRATION: MIL-STD-202, METHOD 204, TEST CONDITION D. | MOISTURE RESISTANCE: MIL-STD-202, METHOD 106. |
| SHOCK: MIL-STD-202, METHOD 213, TEST CONDITION I. | INSULATION RESISTANCE: 2000 MEGOHMS AFTER HUMIDITY. |
| SALT SPRAY: MIL-STD-1344, METHOD 1001, CONDITION B. | |
| DURABILITY: 500 CYCLES. | |

CONFIGURATIONS

| | |
|--|--|
| ARINC HOUSING. | CRIMP/CLAMP, SOLDER/CLAMP, DIRECT SOLDER, DIRECT CRIMP |
| CABLES: RG-316, RG-178, SEMI-RIGID & FLEX .085 & .047. | |
| OTHER CABLES AVAILABLE. | |