

Notes:

168-0020-0860A

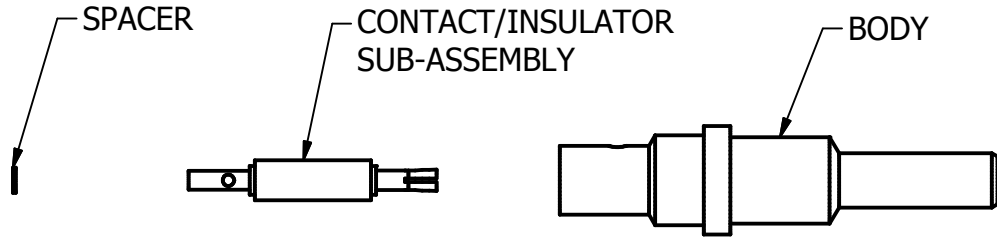
- 1) Design and Interface per IDS 168.
- 2) Blindmate RF/Microwave Contact for ARINC 600 Connectors.
- 3) Size 12 PkZ®, 50 Ohm, 40 GHz Straight Plug, Without Gasket.
- 4) Direct Solder to RG-405 Cable (M17/133) .086 S.R.
- 5) For Use in ARINC 600 Connectors.
- 6) Spacer and Contact/Insulator Sub-Assembly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



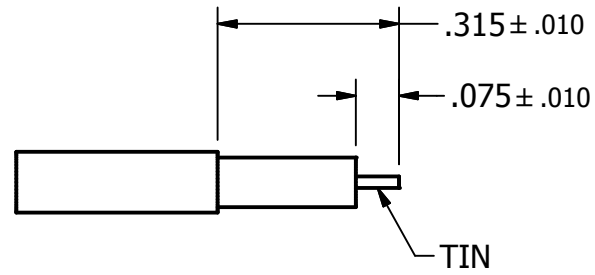
MATERIAL:				<small>UNLESS OTHERWISE SPECIFIED, PALCO WORKMANSHIP STANDARDS APPLY. DIMENSIONS IN INCHES OR (METRIC).</small> <small>DO NOT SCALE PRINTS</small> <small>TOLERANCES ARE:</small> <small>FRACTIONS: ± 1/64</small> <small>DECIMALS: .XX ± .01</small> <small>.XXX ± .005</small> <small>ANGLES: ± 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>								
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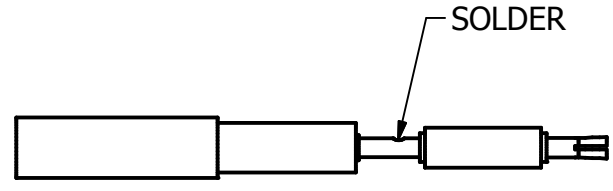


Step 1 (for Flex style cable only)
 Dip end of cable into flux and then tip dip cable to $.30 \pm .02$ " using 63/37 solder and solder pot @ $500 \pm 25^\circ\text{F}$ for six second max.

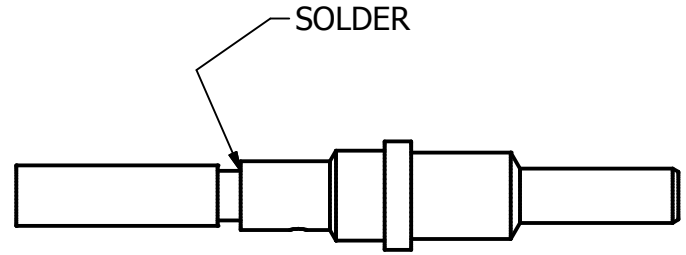


Step 2
 Trim cable to dimensions shown, ($.315 \pm$ dimension for jacketed cables only). Tin center conductor.

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

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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	
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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.	