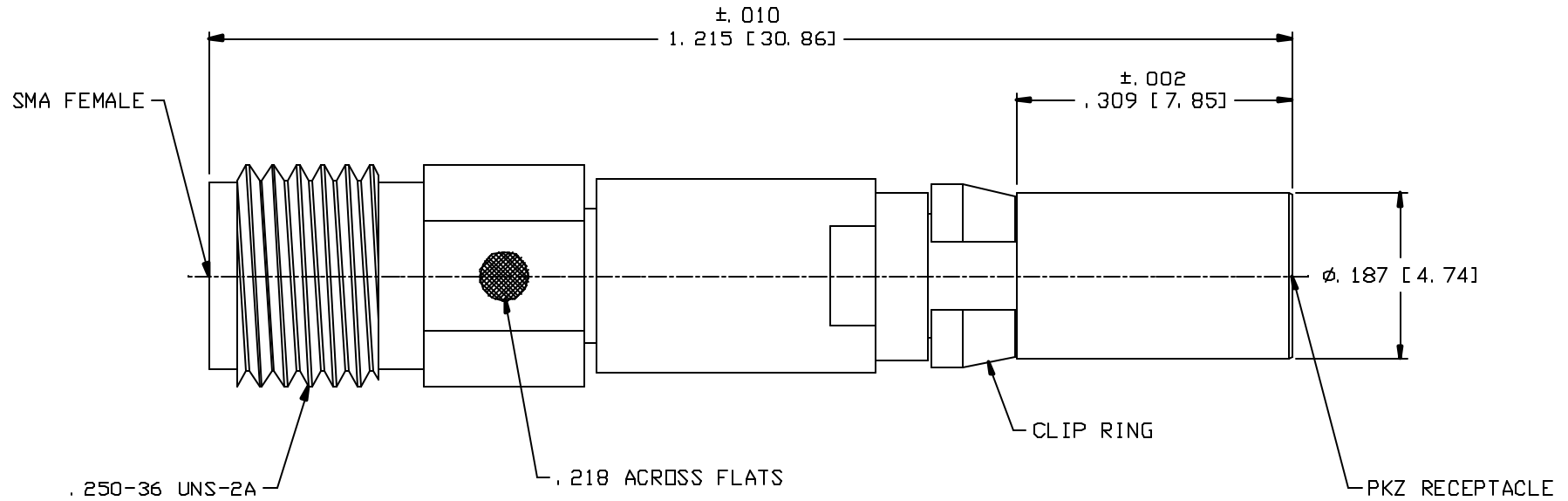


CAD DRAWING - NO MANUAL REVISIONS



**NOTES:**

1. DESIGN AND INTERFACES PER I. D. S. 26 & 20.
2. ELECTRICAL TEST 100% TO 3GHZ @ 1.25 VSWR MAX.

				<p><b>PALCO CONNECTOR</b></p> <p>22 GREAT HILL RD., NAUGATUCK, CT 06770</p> <p>UNLESS OTHERWISE SPECIFIED, PALCO WORKMANSHIP STANDARDS APPLY</p> <p>TOLERANCES ON: DECIMALS: XX ± .01 .XXX ± .005 ANGLES ±1/2° 32</p> <p>DIMENSIONS IN INCHES OR (METRIC) DO NOT SCALE PRINTS</p>	DRAWN EW	CHECKED PRP	ENGINEER EW	APPROVED PRP	FSCM 58167	
G	PER ECN 10369	05/17/10	JEM			DESCRIPTION SMA JACK TO PKZ RECEPTACLE ADAPTOR				
F	PER ECN 9364	4/25/08	HN			DATE 06/01/90	DRAWING NO. 2620-1100-00	PLATING OPT. G		
E	PER ECN 3554	09/19/96	HN							
REV.	DESCRIPTION	DATE	APPR.							

THE INFORMATION IN THIS DOCUMENT IS CONFIDENTIAL AND PROPRIETARY AND MAY NOT BE USED FOR ANY PURPOSE WITHOUT THE WRITTEN CONSENT OF PALCO.

INTERFACE DESIGN STANDARD		<b>PALEO</b> <b>CONNECTOR</b>	REV	DESCRIPTION	DATE	APPR
IDS-26			D	PER ECN 6752	10/24/02	HN
PAGE 1 OF 2	DATE: 02/28/94		E	PER ECN 7265	01/27/04	HN
DRAWN: JEM	APPROVED: HN	22 GREAT HILL ROAD, NAUGATUCK, CT. 06770 PHONE: (203) 729-9090 FAX: (203) 723-1794	F	PER ECN 9935	05/22/09	JEM
			G	PER ECN 10145	01/20/10	JEM

DESCRIPTION: 26 SERIES, SIZE 8 PkZ®

**MECHANICAL**

**MATERIALS**

BODIES:

PLUG BODIES - BRASS PER ASTM B 16.  
RECEPTACLE BODIES - BRASS PER ASTM B 16.

PLATING:

GOLD PER MIL-G-45204.  
COPPER PER MIL-C-14550.  
NICKEL PER QQ-N-290.

INSULATORS - VIRGIN TEFLON (PTFE) PER ASTM D 1710 AND ASTM D 1457.  
RETAINING RING - BERYLLIUM COPPER PER ASTM B 196.  
MALE CONTACT - BERYLLIUM COPPER PER ASTM B 197.  
FEMALE CONTACTS - BERYLLIUM COPPER PER ASTM B 197.  
WEATHER SEAL GASKET (OPTIONAL) - SILICONE RUBBER PER ZZ-R-765.  
EMI GASKET - BERYLLIUM COPPER ASTM B 196.

**FINISHES (ADD LETTER TO END OF PART NUMBER)**

"A" - .000050 MIN. GOLD OVER NICKEL  
"B" - .000030 MIN. GOLD OVER NICKEL  
"C" - .000050 MIN. GOLD OVER COPPER  
"D" - .000030 MIN. GOLD OVER COPPER

**MATING CHARACTERISTICS**

OUTER BODIES \_\_\_\_\_ 3 LBS MAX. INSERTION.  
2 OZ. MIN. WITHDRAWAL.  
CENTER CONTACTS \_\_\_\_\_ 32 OZ. MAX. INSERTION.  
.5 OZ. MIN. WITHDRAWAL.  
HOUSING RETENTION \_\_\_\_\_ 12 LBS. MIN.  
AXIAL MATING TOLERANCE \_\_\_\_\_ .090

**ELECTRICALS**

FREQUENCY RANGE: DC TO 32 GHz.  
VOLTAGE RATING STRAIGHT: 1000 VRMS.  
VOLTAGE RATING ANGLED: 800 VRMS.  
CURRENT RATING: 5 AMPS.  
INSULATION RESISTANCE: 2000 MEGOHMS MIN.  
INSERTION LOSS: .06  $\sqrt{f(\text{GHz})}$  dB

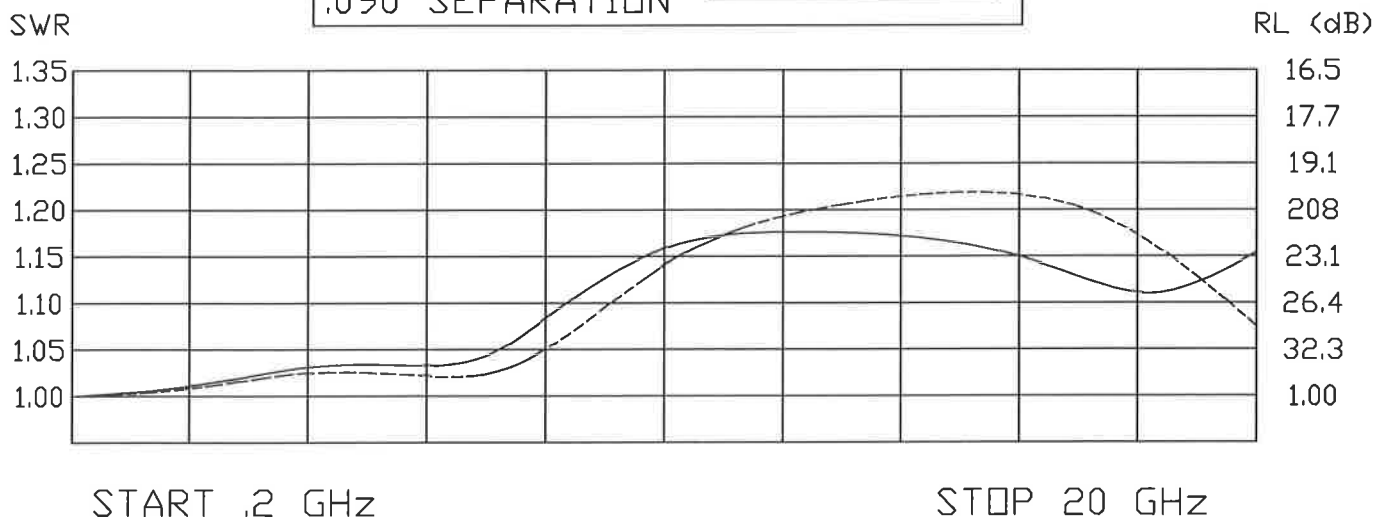
CONTACT RESISTANCE: CENTER CONTACT 5 MILLIOHMS  
CONTACT RESISTANCE: OUTER CONTACT 3 MILLIOHMS  
VSWR: 1.08 + .009(f) GHz., RG-402 CABLE.  
1.15 + .02 (f) GHz., RG-174 & RG-316 CABLES.  
1.15 + .01 (f) GHz., RG-142, 223, 303 & 400 CABLES.

**ENVIRONMENTAL**

OPERATING TEMPERATURE: -65°C to +165°C  
VIBRATION: MIL-STD-202, METHOD 204, TEST CONDITION D.  
SHOCK: MIL-STD-202, METHOD 213, TEST CONDITION I.  
SALT SPRAY: MIL-STD-1344, METHOD 1001, CONDITION B.  
DURABILITY: 500 CYCLES.

THERMAL SHOCK: MIL-STD-202, METHOD 107, TEST CONDITION B, EXCEPT HIGH TEMPERATURE SHALL BE +85°C.  
MOISTURE RESISTANCE: MIL-STD-202, METHOD 106.  
NO MEASUREMENT AT HIGH HUMIDITY. INSULATION RESISTANCE 2000 MEGOHMS AFTER HUMIDITY.

FULL MATING \_\_\_\_\_  
.090 SEPARATION \_\_\_\_\_



INTERFACE DESIGN STANDARD	
IDS-26	
PAGE 2 OF 2	DATE: 06/28/94
DRAWN: JEM	APPROVED: HN

**PALEO**  
**CONNECTOR**

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

REV	DESCRIPTION	DATE	APPR
D	PER ECN 6752	10/24/02	HN
E	PER ECN 7625	01/27/04	HN
F	PER ECN 9935	05/22/09	JEM
G	PER ECN 10145	01/20/10	JEM

DESCRIPTION: 26 SERIES, PKZ<sup>®</sup> SIZE 8

	INCH	[mm]	SUFFIX
A	.250	[6.35]	MIN.
B	$\phi$ $\frac{.153}{.156}$	$\frac{[3.89]}{[3.96]}$	
C	$\frac{.126}{.132}$	$\frac{[3.20]}{[3.35]}$	MIN.
D	$\phi$ .206	[5.23]	

PLUG

	INCH	[mm]	SUFFIX
A	.245	[6.22]	MIN.
B	$\frac{.143}{.147}$	$\frac{[3.63]}{[3.73]}$	
C	$\phi$ .206	[5.23]	
D	$\phi$ $\frac{.0395}{.0410}$	$\frac{[1.00]}{[1.04]}$	
E	$\phi$ .157	[3.99]	MIN.

RECEPTACLE

INTERFACE DESIGN STANDARD			REV	DESCRIPTION	DATE	APPR
IDS-20			C	PER ECN 7035	03/31/03	HN
PAGE 1 OF 2	DATE: 02/28/94		D	PER ECN 8609	08/02/06	JEM
DRAWN: JEM	APPROVED: HN		E	PER ECN 9052	09/05/07	HN
22 GREAT HILL ROAD, NAUGATUCK, CT. 06770 PHONE: (203) 729-9090 FAX: (203) 723-1794						

DESCRIPTION: SMA 20 SERIES

### MECHANICAL

#### MATERIALS

BODIES, NUTS- CORROSION RESISTANT STEEL, PER ASTM-A-582 & ASTM-A-484.  
 INSULATORS - TEFLON (PTFE) PER ASTM-D-1457.  
 CONTACTS, MALE AND FEMALE- BERYLLIUM COPPER PER ASTM-B-196.  
 GASKETS - SILICONE RUBBER PER ZZ-R-765.

#### FINISHES (ADD LETTER TO END OF PART NUMBER)

"G": BODY - .000020 MIN. GOLD OVER .000050 NICKEL;  
 CONTACT - .000050 GOLD OVER .000050 MIN. NICKEL  
 "P": BODY - PASSIVATED  
 CONTACT - .000050 GOLD OVER .000050 MIN. NICKEL  
 OTHER METAL PARTS - .00002 GOLD PLATED  
 TO MEET THE ENVIRONMENTAL REQUIREMENTS OF MIL-C-39012.

### MATING CHARACTERISTICS

CENTER CONTACT PIN AND SOCKET PER MIL-C-39012 (1 OZ. MIN) (2 LBS. MAX)  
 FORCE TO ENGAGE /DISENGAGE- 2 IN.-LBS. MAX. TORQUE.  
 COUPLING NUT RETENTION - 60 LBS. MIN.  
 COUPLING PROOF TORQUE 15 IN.-LBS. MIN.  
 DURABILITY: 500 CYCLES PER MIL-C-39012.  
 RECOMMENDED TORQUE - 7-10 IN.-LBS.

### ELECTRICALS

IMPEDANCE: 50 OHMS.  
 FREQUENCY RANGE: DC TO 18 GHz.  
 INSULATION RESISTANCE: 5000 MEGAOHMS.  
 TEMPERATURE RATING: -65°C TO +165°C

	<u>RG 402 (141)</u> SEMI-RIGID	<u>RG 405 (085)</u> SEMI-RIGID
DWV -	1,500 VOLTS RMS.	1,000 VOLTS RMS.
RF HIGH POTENTIAL -	1,000 VOLTS RMS.	670 VOLTS RMS.
CONTACT RESISTANCE -		
CENTER CONTACT:	2.0 MILLIOHMS MAX.	2.0 MILLIOHMS MAX.
OUTER CONTACT:	2.0 MILLIOHMS MAX.	2.0 MILLIOHMS MAX.
OUTER CONTACT TO CABLE:	0.5 MILLIOHMS MAX.	0.5 MILLIOHMS MAX.
VSWR -		
DC - 18.0 GHz:	1.05 + .005F (GHz)	1.05 + .005F (GHz)
CORONA LEVEL -	375 VOLTS MIN.	335 VOLTS MIN.
R.F. LEAKAGE -	-90 dB MIN.	-90 dB MIN.
INSERTION LOSS -	.03 x $\sqrt{F}$ (GHz)	.03 x $\sqrt{F}$ (GHz)

### ENVIRONMENTAL

VIBRATION: MIL-STD-202, METHOD 204, TEST CONDITION D.  
 SHOCK: MIL-STD-202, METHOD 213, TEST CONDITION I.  
 THERMAL SHOCK: MIL-STD-202, METHOD 107, TEST CONDITION B.  
 CORROSION: MIL-STD-202, METHOD 101, TEST CONDITION B, 5% SALT SOLUTION.  
 MOISTURE RESISTANCE: MIL-STD-202, METHOD 106, OMIT STEP 7B.

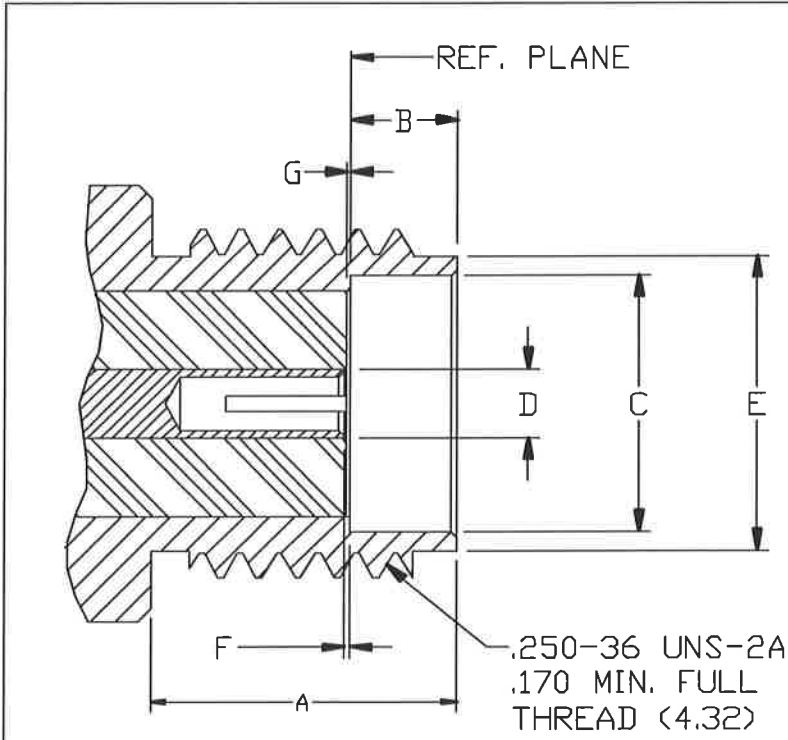
INTERFACE DESIGN STANDARD	
IDS-20	
PAGE 2 OF 2	DATE: 02/28/94
DRAWN: JEM	APPROVED: HN

# PALEO CONNECTOR

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

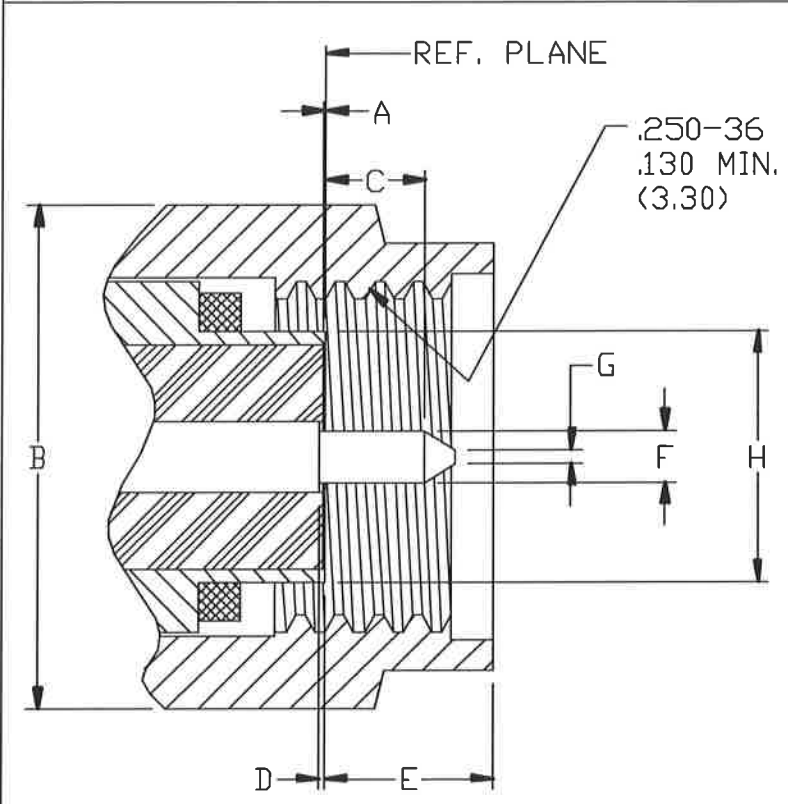
REV	DESCRIPTION	DATE	APPR
C	PER ECN 7035	03/31/03	HN
D	PER ECN 8609	08/02/06	JEM
E	PER ECN 9052	09/05/07	HN

## DESCRIPTION: SMA 20 SERIES



DIMENSIONS ARE TO MIL-STD-348A.

	INCH	[mm]	SUFFIX
A	.218	[5.54]	MIN.
B	.078 .074	[1.98] [1.88]	
C	∅.181	[∅.460]	MIN.
D	∅.051 ∅.049	[∅1.30] [∅1.24]	
E	∅.216 ∅.208	[∅5.49] [∅5.28]	
F	.000 .010	[0.00] [0.25]	CONT.
G	.000 .007	[0.00] [0.18]	INS.



DIMENSIONS ARE TO MIL-STD-348A.

	INCH	[mm]	SUFFIX
A	.000 .007	[0.00] [0.18]	INS.
B	.312	[7.92]	HEX
C	.050	[1.27]	MIN.
D	.000 .010	[0.00] [0.25]	CONT.
E	.135	[3.43]	MAX.
F	∅.0370 ∅.0355	[∅0.94] [∅0.90]	
G	∅.010	[∅0.25]	FLAT
H	∅.1808	[∅4.59]	MAX.