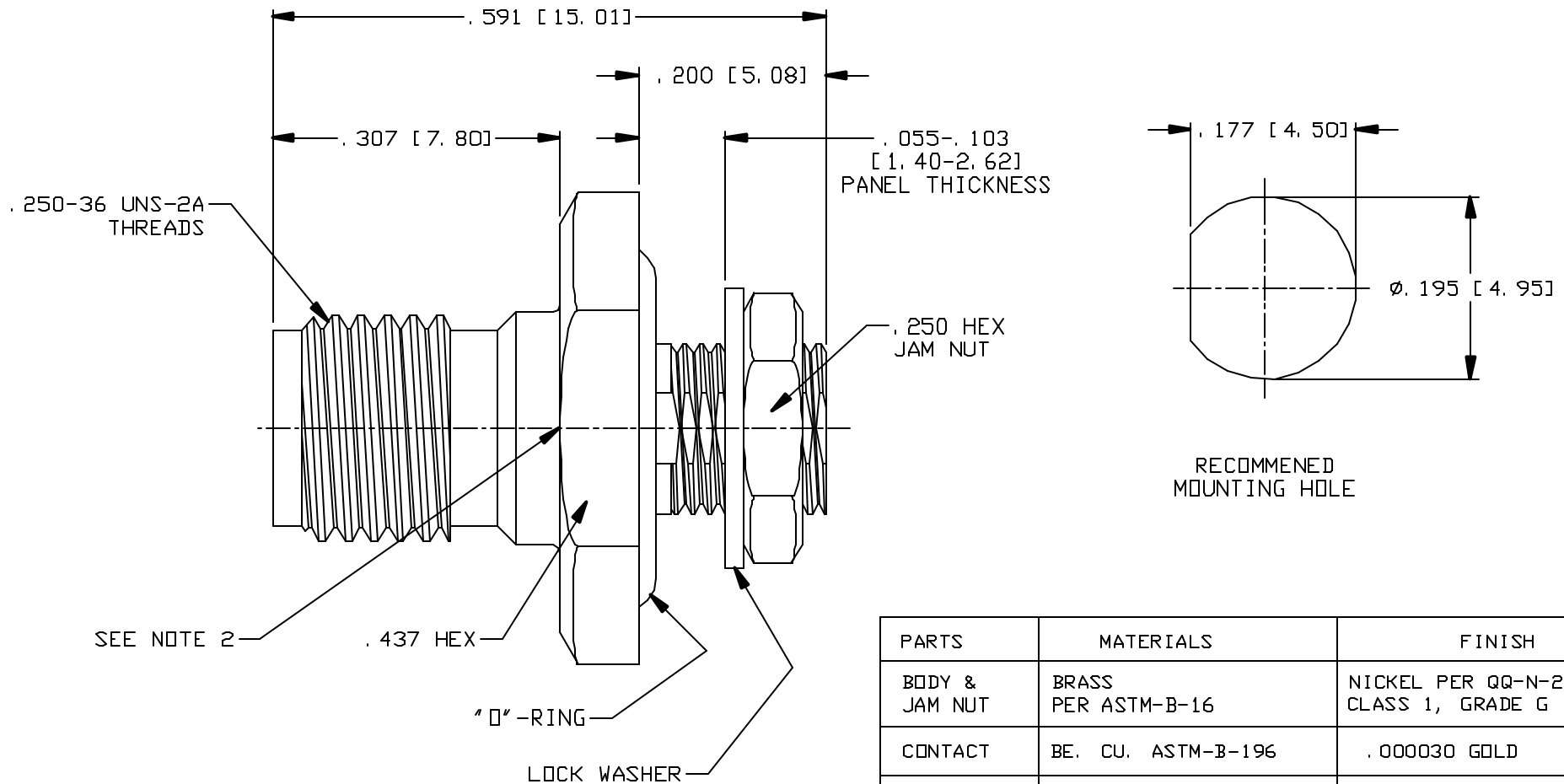


CAD DRAWING - NO MANUAL REVISIONS



- NOTES:
1. DESIGN AND INTERFACE SMA PER I. D. S. -22, AND MMCX PER I. D. S. -33.
  2. MARKED: 2233-1180-00N.
  3. JAM NUT, LOCK WASHER & "O"-RING SUPPLIED LOOSE.
  4. IP67 WHEN IN MATED OR UN-MATED CONDITION.

PARTS	MATERIALS	FINISH
BODY & JAM NUT	BRASS PER ASTM-B-16	NICKEL PER QQ-N-290, CLASS 1, GRADE G
CONTACT	BE. CU. ASTM-B-196	.000030 GOLD
LOCK WASHER	BRONZE ASTM-B-591	NICKEL PER QQ-N-290, CLASS 1, GRADE G
INSULATOR	TEFLON, ASTM-D-1710	
O-RINGS	SILICON RUBBER: PER ASTM-D-2000	

A	PER ECN 11464	9/28/12	JEM
REV.	DESCRIPTION	DATE	APPR.

# PALCO CONNECTOR

22 GREAT HILL RD., NAUGATUCK, CT 06770  
 UNLESS OTHERWISE SPECIFIED, PALCO WORKMANSHIP STANDARDS APPLY  
 TOLERANCES ON: DECIMALS: XX ± .01 .XXX ± .005 ANGLES ±1/2° 32'  
 DIMENSIONS IN INCHES OR (METRIC) DO NOT SCALE PRINTS

CATALOG ITEM

DRAWN JEM	CHECKED MS	ENGINEER JEM	APPROVED MS	FSCM 58167
		DESCRIPTION FRONT MOUNT ADAPTOR SMA JACK TO MMCX JACK		
DATE 04/26/12	DRAWING NO. 2233-1180-00		PLATING OPT. N	

INTERFACE DESIGN STANDARD		 22 GREAT HILL ROAD, NAUGATUCK, CT. 06770 PHONE: (203) 729-9090 FAX: (203) 723-1794	REV	DESCRIPTION	DATE	APPR
IDS-22			D	PER ECN 5828	02/12/01	HN
PAGE 1 OF 2	DATE: 03/05/97		E	PER ECN 6802	11/07/02	HN
DRAWN: JEM	APPROVED: HN		F	PER ECN 7036	03/31/03	HN
		G	PER ECN 8609	08/02/06	JEM	

DESCRIPTION: SMA 22 SERIES (BRASS)

MECHANICAL

MATERIALS

BODIES, NUTS- BRASS 1/2 HD, PER ASTM-B-16, ALLOY 36000.  
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)

CONTACTS - .00005 GOLD OVER .00005 NICKEL PER MIL-G-45204  
TO MEET THE ENVIRONMENTAL REQUIREMENTS OF MIL-C-39012.  
OTHER METAL PARTS - .000020 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.  
CONNECTOR DURABILITY - 100 CYCLES PER MIL-PRF-39012.

	WALL THICKNESS OF BODY	
	THICK	THIN
COUPLING PROOF TORQUE, IN.-LBS	15 MIN.	7-10
RECOMMENDED TORQUE, IN.-LBS.	7-10	5-6.5

ELECTRICALS

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

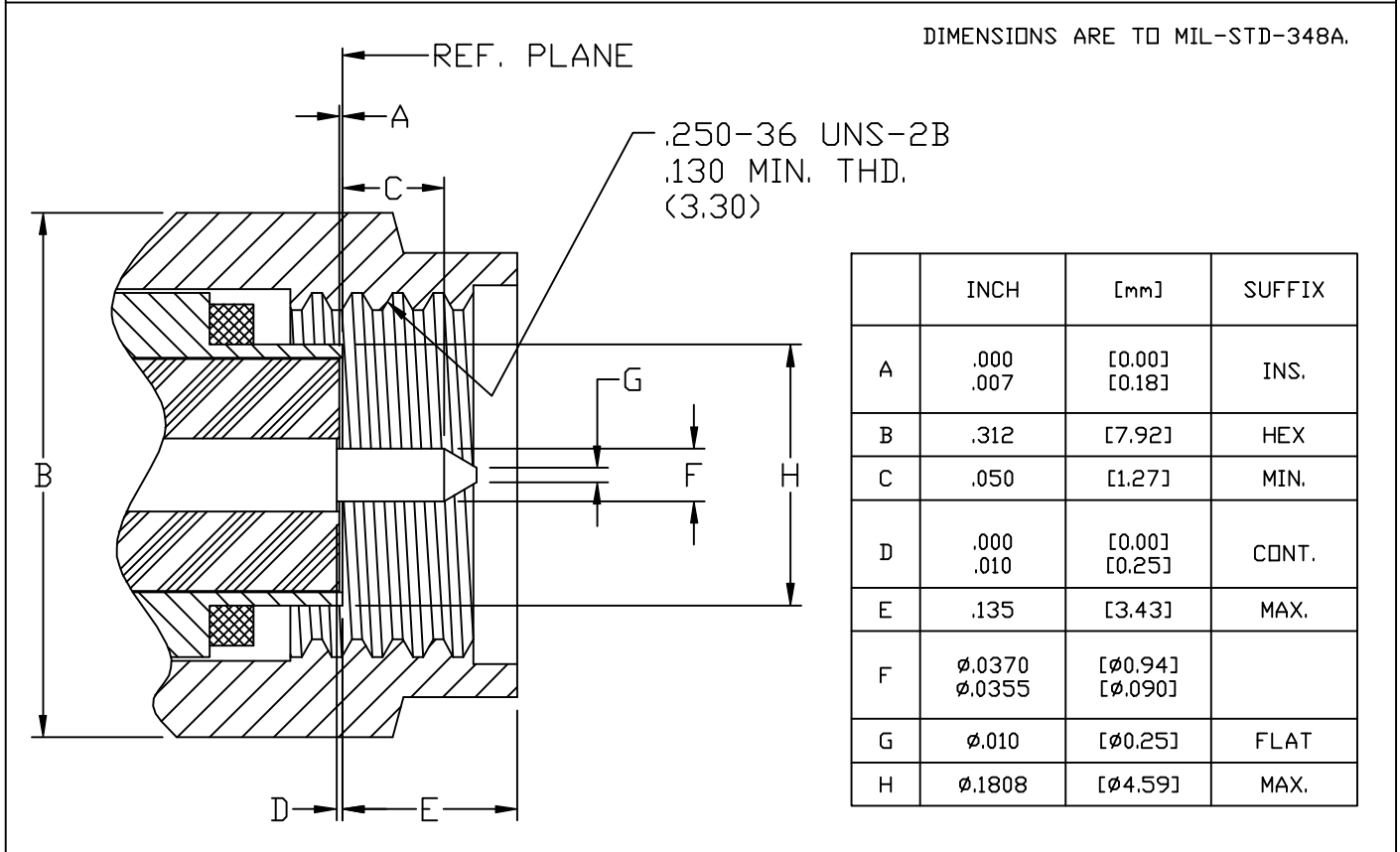
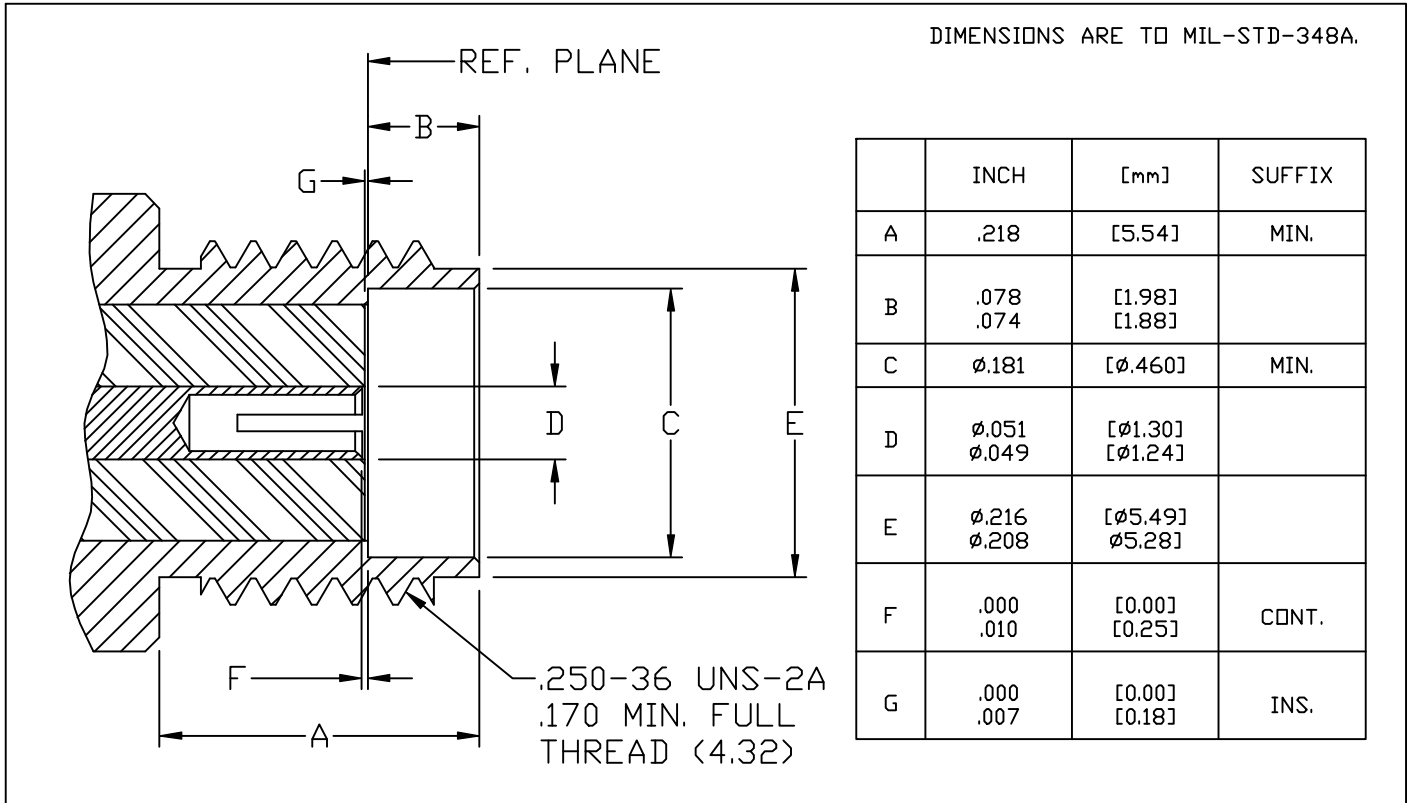
	<u>RG 402 (141)</u> <u>SEMI-RIGID</u>	<u>RG 405 (085)</u> <u>SEMI-RIGID</u>
DWV -	1,500 VOLTS RMS.	1,000 VOLTS RMS.
RF HIGH POTENTIAL -	1,000 VOLTS RMS.	670 VOLTS RMS.
CONTACT RESISTANCE -		
CENTER CONTACT:	2.0 MILLIOHMS MAX.	2.0 MILLIOHMS MAX.
OUTER CONTACT:	2.0 MILLIOHMS MAX.	2.0 MILLIOHMS MAX.
OUTER 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 √F (GHz)	.03 x √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.

REV	DESCRIPTION	DATE	APPR
D	PER ECN 5828	02/12/01	HN
E	PER ECN 6802	11/07/02	HN
F	PER ECN 7036	03/31/03	HN
G	PER ECN 8609	08/02/06	JEM

DESCRIPTION: SMA 22 SERIES (BRASS)



INTERFACE DESIGN STANDARD		<b>PALEO</b> <b>CONNECTOR</b> 22 GREAT HILL ROAD, NAUGATUCK, CT. 06770 PHONE: (203) 729-9090 FAX: (203) 723-1794	REV	DESCRIPTION	DATE	APPR
IDS-33			C	PER ECN 4954	06/23/99	HN
PAGE 1 OF 2	DATE: 02/28/94		D	PER ECN 8629	08/23/06	JM
DRAWN: JEM	APPROVED: HN		E	PER ECN 9615	11/07/08	JEM
			F	PER ECN 10914	03/30/11	JEM

DESCRIPTION: 33 SERIES, MMCX, PER BS EN 122340.

## MECHANICAL

### MATERIALS

BODIES AND MALE CONTACTS - BRASS PER ASTM-B-16.  
FERRULES AND CAPS - BRASS PER ASTM-B-16.  
INSULATORS - TEFLON (PTFE) PER ASTM-D-1710.  
FEMALE CONTACTS AND CLIP RING - BERYLLIUM COPPER PER ASTM-B-196.

### FINISHES <ADD LETTER TO END OF PART NUMBER>

GOLD PER MIL-G-45204.  
COPPER PER MIL-C-14550.  
NICKEL PER QQ-N-290.  
BODIES AND CONTACTS: "A" - .000050 MIN. GOLD OVER NICKEL.  
BODIES AND CONTACTS: "B" - .000030 MIN. GOLD OVER NICKEL.  
OTHER METAL PARTS:  
GOLD OR NICKEL PLATED TO MEET THE ENVIRONMENTAL REQUIREMENTS.

## MATING CHARACTERISTICS

ENGAGEMENT: 3.5 LBS. MAX.  
DISENGAGEMENT: 1.3 TO 3.4 LBS.  
DURABILITY: 500 CYCLES.  
CONFORMS TO CECC 22 340 STANDARDS.

## ELECTRICALS

IMPEDANCE: 50 OHMS.  
FREQUENCY RANGE: DC TO 6 GHz.  
VOLTAGE RATING: 170 VOLTS RMS.  
INSULATION RESISTANCE: 5000 MEGOHMS MIN.  
TEMPERATURE RATING: -65°C TO +165°C  
DMV: 500 VOLTS RMS.  
RF LEAKAGE: 55 dB MIN. @ 1 GHz.  
CONTACT RESISTANCE: CENTER CONTACT: 5.0 MILLIOHMS.  
                                OUTER CONTACT: 3.0 MILLIOHMS.  
VSWR: 1.20 TYP. FOR STRAIGHT CONNECTORS.  
           1.30 TYP. FOR RIGHT ANGLE CONNECTORS.  
INSERTION LOSS: 0.2 dB MAX. @ 1 GHz.

## ENVIRONMENTAL

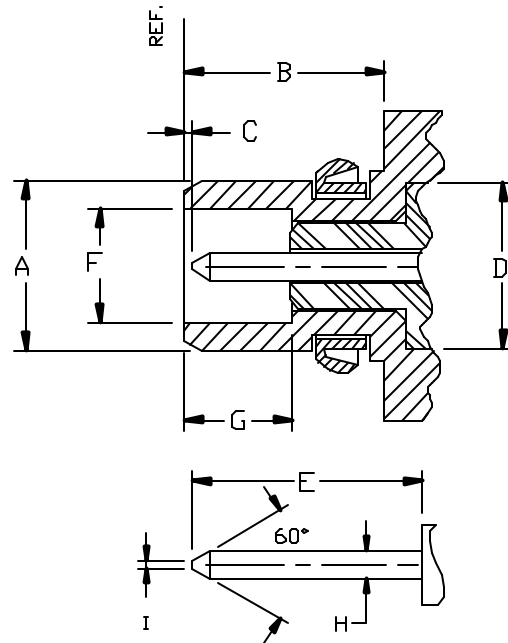
VIBRATION: MIL-STD-202, METHOD 204, TEST CONDITION D.  
SHOCK: MIL-STD-202, METHOD 213, TEST CONDITION A.  
THERMAL SHOCK: MIL-STD-202, METHOD 107, TEST CONDITION C.  
CORROSION: MIL-STD-202, METHOD 101, TEST CONDITION B.

REV	DESCRIPTION	DATE	APPR
C	PER ECN 4954	06/23/99	HN
D	PER ECN 8629	08/23/06	JM
E	PER ECN 9615	11/07/08	JEM
F	PER ECN 10914	03/30/11	JEM

DESCRIPTION: 33 SERIES, MMCX, PER BS EN 122340.

PLUG

	MIN.	MAX.
A	—	∅.094
B	.106	—
C	.000	.010
D	∅.091	∅.093
E	—	.124
F	∅.062	∅.064
G	.057	—
H	∅.015	∅.017
I	—	∅.008



JACK

	MIN.	MAX.
A	∅.095	—
B	.102	—
C	.035	.047
D	∅.091	∅.093
E	.055	—
F	∅.118	∅.120
G	∅.113	∅.114
H	.062	.064
I	.091	.092
K	—	.009

