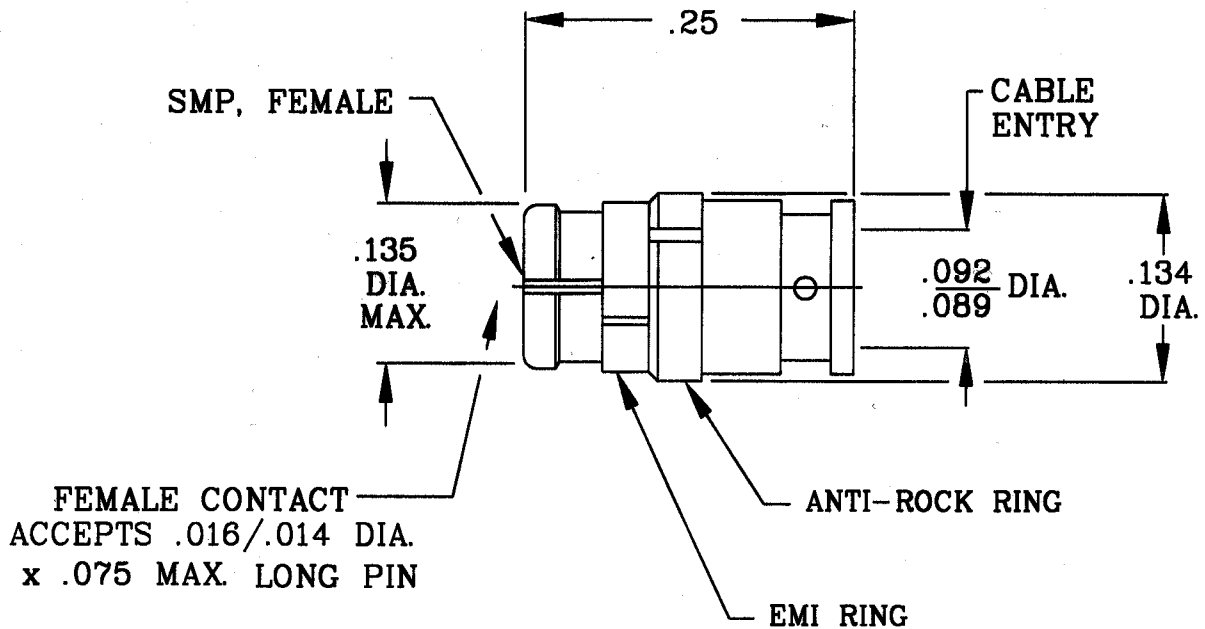


# SPECIFICATION CONTROL DRAWING



1. MATING INTERFACE DIMENSIONS PER DYNAWAVE SPECIFICATION MD-20-8 AND MIL-STD 348, Fig. 326-1.

## 2. ELECTRICAL

FREQUENCY RANGE GHz	_____	DC TO 40.0 GHz.
VSWR (MAX.) *	_____	DC TO 18.0 GHz., 1.20 MAX.
	_____	18.0 TO 26.5 GHz., 1.35 MAX.
	_____	26.5 TO 40.0 GHz., 1.50 MAX.
INSERTION LOSS (dB MAX.) *	_____	.12 dB x $\sqrt{\text{FGHz}}$ .
NOMINAL IMPEDANCE (OHMS)	_____	50
VOLTAGE RATING (MAX. VRMS)	_____	335
RF LEAKAGE (MIN. dB DOWN)	_____	3.0 GHz., -80 dB - FGHz.
	_____	26.5 GHz., -85 dB - FGHz.
TEMPERATURE RATING (DEGREES CENTIGRADE)	_____	-85 ° c TO +165 ° c
DIELECTRIC WITHSTANDING VOLTAGE (MAX. VRMS)	_____	500
INSULATION RESISTANCE (MIN. MEGOHMS)	_____	5,000
CONTACT RESISTANCE		
• CENTER CONTACT (MAX. MILLIOHMS)	_____	6.0
• OUTER CONTACT (MAX. MILLIOHMS)	_____	2.0

\* TERMINATED IN A 50 OHM LOAD

REV.	DCN NO.	DATE	APP.	DIMENSIONS ARE IN INCHES TOLERANCES			HAVERHILL, MA 01835
				DECIMALS X ± .030 XX ± .010 XXX ± .005	FRACTIONAL ± 1/16"	ANGULAR X ± 1' 0" X° X' ± 15'	
-	1032	11/93	M. B.	SURFACE ROUGHNESS 63 √ MIL-STD 10.			
AA	97-0641	11/16/97	DGG	DRAWN	M. B.	DATE 11/93	TITLE SMP, FEMALE DIRECT SOLDER TO .085 S.R. CABLE
AB	98-0004	1/12/98	DGG				
AC	02-0235	3/29/02	S	APPROVED T.S. DATE 11/93			
				CODE IDENT. 2J899	SHEET 1 OF 2		DWG. NO. 2000-8520-5425

# SPECIFICATION CONTROL DRAWING

## 3. MECHANICAL

### CAPTIVATION-CENTER CONTACT

- MIN. AXIAL FORCE \_\_\_\_\_ N/A
- MIN. RADIAL TORQUE \_\_\_\_\_ N/A

### CONNECTOR ENGAGEMENT FORCES

- INSERTION (MAX. LBS.) \_\_\_\_\_ 15.0 (FULL DETENT)
- WITHDRAWAL (MIN. LBS.) \_\_\_\_\_ 5.0 (FULL DETENT)

CONNECTOR DURABILITY (MIN. MATING) \_\_\_\_\_ 100 (FULL DETENT)

CABLE RETENSION (SOLDER) \_\_\_\_\_ 50.0 LBS. MIN.

## 4. ENVIRONMENTAL

TEMPERATURE CYCLING \_\_\_\_\_ MIL-STD-202, METHOD 102, COND. C ( -85° c TO + 165° c )  
SHOCK \_\_\_\_\_ MIL-STD-202, METHOD 213, COND. I (100 G's)  
VIBRATION (HIGH FREQUENCY) \_\_\_\_\_ MIL-STD-202, METHOD 204, COND. D (20 G's)  
VIBRATION (RANDOM) \_\_\_\_\_ MIL-STD-202, METHOD 214, TEST COND. F.  
THERMAL SHOCK \_\_\_\_\_ MIL-STD-202, METHOD 107, TEST COND. B, HIGH TEMP. +165° c.  
MOISTURE RESISTANCE \_\_\_\_\_ MIL-STD-202, METHOD 106, LESS STEP 7b, 1000 MEGOHMS (5 MINUTES).  
CORROSION \_\_\_\_\_ MIL-STD-202, METHOD 101, COND. B (48 HOURS)  
BAROMETRIC PRESSURE (ALTITUDE) \_\_\_\_\_ MIL-STD-202, METHOD 105, COND. C ( 70,000 FT. ) ( 190 VRMS MIN.)  
CORONA LEVEL \_\_\_\_\_ 70,000 FEET.

## 5. MATERIAL

CONNECTOR BODY, CENTER CONTACT, \_\_\_\_\_ BERYLLIUM COPPER PER ASTM B196-90, COPPER ALLOY  
ANTI-ROCK RING AND EMI RING \_\_\_\_\_ No. UNS C17300, TEMPER T004.

INSULATOR \_\_\_\_\_ TEFLON PER D 4894.

## 6. FINISH

CONNECTOR BODY, CENTER CONTACT, \_\_\_\_\_ GOLD PER MIL-G-45204, TYPE II, GRADE C, CLASS 1  
ANTI-ROCK RING AND EMI RING \_\_\_\_\_ (.00005-.0001 THK.) OVER NICKEL PER QQ-N-290, CLASS 1  
\_\_\_\_\_ (.00005-.0001 THK.).

INSULATOR \_\_\_\_\_ N/A

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SHEET 2 OF 2

DWG.  
NO.

2000-8520-5425

REV.

AC

# CABLE/CONNECTOR ASSEMBLY INSTRUCTIONS

DRAWING No. 2000-8520-5425

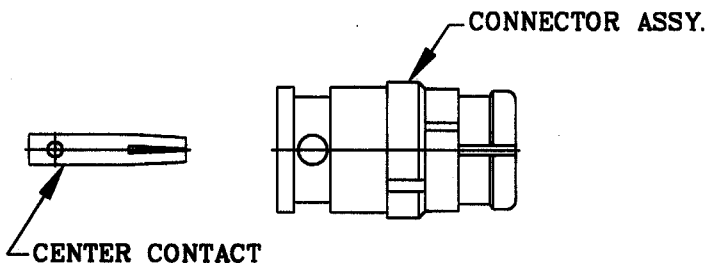
REV.	DCN NUMBER	DATE	APP.
CA	97-0641	11/8/97	DGG
CB	98-0580	7/7/98	DGG
CC	98-1053	11/5/98	GL
CD	00-1277	10/10/00	DGG
CE	02-0235	4/1/02	DGG

CONNECTOR TYPE: SMP, FEMALE  
DIRECT SOLDER ATTACHMENT

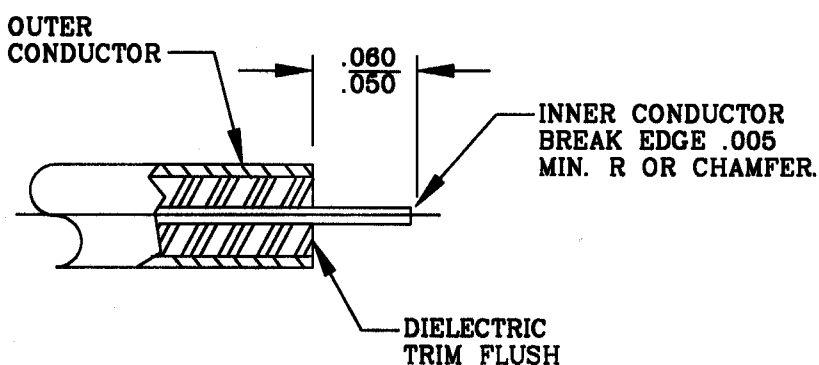
CABLE TYPE: STD. .085 SEMI-RIGID

### PARTS SUPPLIED

Approved T.S.

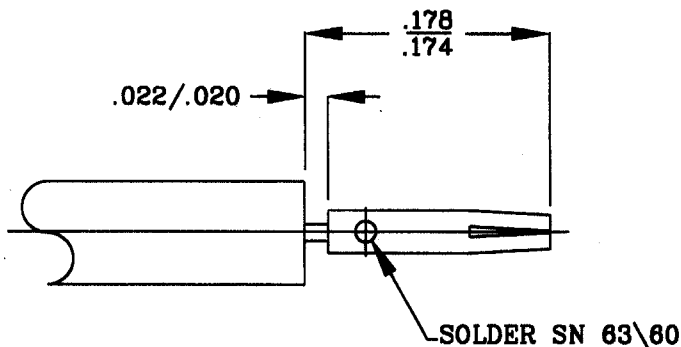


Drawn C.T.



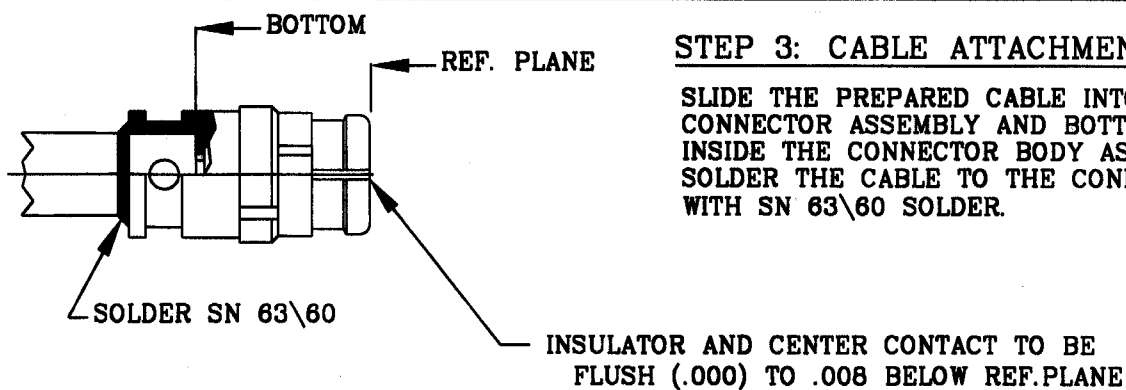
### STEP 1: CABLE PREPARATION

TRIM OUTER CONDUCTOR AND DIELECTRIC TO DIMENSIONS SHOWN EXPOSING INNER CONDUCTOR. DO NOT EXCESSIVELY NICK INNER CONDUCTOR.



### STEP 2: CONTACT ATTACHMENT

SLIDE THE CENTER CONTACT OVER THE CENTER CONDUCTOR OF THE CABLE. SET GAP AS SHOWN AND SOLDER TO DIMENSION SHOWN WITH SN 63\60 SOLDER.



### STEP 3: CABLE ATTACHMENT

SLIDE THE PREPARED CABLE INTO THE CONNECTOR ASSEMBLY AND BOTTOM CABLE INSIDE THE CONNECTOR BODY AS SHOWN SOLDER THE CABLE TO THE CONNECTOR WITH SN 63\60 SOLDER.

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DWG. No. 2000-8520-5425