

MECHANICAL CHARACTERISTICS	
INTERFACE	MIL-STD-348, FIGURE 310-1
IN ACCORDANCE WITH THE INTENT OF SLANT SHEET	MIL-PRF-39012/55 REF.
RECOMMENDED MATING TORQUE	9 IN-LBS. NOM.
COUPLING PROOF TORQUE	15 IN-LBS. MIN.
COUPLING NUT RETENTION	60 LBS. MIN.
FORCE TO ENGAGE	2 IN-LBS. MAX.
FORCE TO DISENGAGE	2 IN-LBS. MIN.
DURABILITY	500 CYCLES MIN.
AXIAL CONTACT RETENTION (FROM INTERFACE)	6 LBS. MIN.
AXIAL CONTACT RETENTION (FROM CABLE)	6 LBS. MIN.
CABLE RETENTION	10 LBS.
MASS	11.92 GRAMS NOM.
ELECTRICAL CHARACTERISTICS	
IMPEDANCE	50 Ohms NOM.
MAXIMUM FREQUENCY	32 GHz
VSWR DC - 18 GHz	1.16:1 MAX.
18 - 32 GHz	1.22:1 MAX.
INSERTION LOSS	0.03 \sqrt{f} (GHz) dB MAX.
DIELECTRIC WITHSTANDING VOLTAGE	900 Vrms MIN.
INSULATION RESISTANCE	5000 MegaOhms MIN.
RF LEAKAGE DC - 32 GHz	-90 dB MIN.
CORONA	230 Vrms MIN. @ 70,000 FEET
RF HIGH POTENTIAL	600 Vrms MIN.
CONTACT RESISTANCE (INNER)	3.0 MilliOhms MAX.
CONTACT RESISTANCE (OUTER)	2.0 MilliOhms MAX.
ENVIRONMENTAL CHARACTERISTICS	
OPERATING TEMPERATURE	-62°C TO 165°C
VIBRATION	MIL-STD-202, METHOD 204, CONDITION D
MECHANICAL SHOCK	MIL-STD-202, METHOD 213, CONDITION I
THERMAL SHOCK	MIL-STD-202, METHOD 107, CONDITION B
CORROSION	MIL-STD-202, METHOD 101, CONDITION B, 5%
MOISTURE RESISTANCE	MIL-STD-202, METHOD 106, CONDITION (NO VIBRATION)
MATERIALS AND FINISH	
COUPLING NUT, LOCKING SLEEVE, CLAMP NUT, BODY	STEEL, CORROSION RESISTANT, ASTM-A-582, UNS NO. S30300, PASSIVATED PER ASTM-A-967
CONTACT	BERYLLIUM COPPER, ASTM-B-196, GOLD PLATED PER MIL-DTL-45204, OVER NICKEL PLATE PER AMS-QQ-N-290
SNAP RING	BERYLLIUM COPPER, PER ASTM-B-197
INSULATOR, DIELECTRIC STOP	TFE FLUOROCARBON PER ASTM-D-1710
GASKET	SILICONE RUBBER PER ZZ-R-765
SPRING	316BRT STAINLESS STEEL, PASSIVATED PER ASTM-B-967
CONTACT RING	BRASS, PER ASTM-B-16, GOLD PLATE PER MIL-DTL-45204, OVER NICKEL PLATE PER AMS-QQ-N-290
APPLICATION	
CABLE(S)	142 SERIES
INSTALLATION	PER CONFIGURATOR

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MATING CONNECTOR REQUIREMENTS

SCALE: 3:1

SCALE: 6:1

BODY MATERIAL: STEEL OR BeCu

MICRO-COAX

UTIFLEX® 142 SERIES CABLE

SHRINK SLEEVE(S) (NOTE 1)

Ø.20 REF. (NOTE 1)

Ø.44 REF. (NOTE 1)

.313 REF. ACROSS FLATS

.312 HEX REF.

.153 REF. (NOTE 2)

.348 REF. (NOTE 2)

.57 REF. (NOTES 1 & 2)

1.293 REF. (NOTE 2)

1.82 REF. (NOTES 1 & 2)

NOTE:

- MARKER LOCATION ON THIS DRAWING IS FOR REFERENCE ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE.
- DIMENSION VALUE BASED ON SLEEVE IN LOCKED POSITION.

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	DWN. PLM	07/26/12								
	CHKD. CCF	07/26/12								
	APPVD.									
TOLERANCES UNLESS OTHERWISE SPECIFIED	TITLE SMA PLUG, SELF-LOCKING, NON-REMOVABLE SLEEVE, 142 SERIES									
XX	± .02		ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED. SCREW THDS. TO BE IN ACCORD WITH ANSI B1.1-1989.							
.XXX	± .005									
.XXXX	± .0010									
ANGLES	±2°									
	FSCM NO.	SIZE	SCALE	SHEET NO.	DRAWING NO.	REV				
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