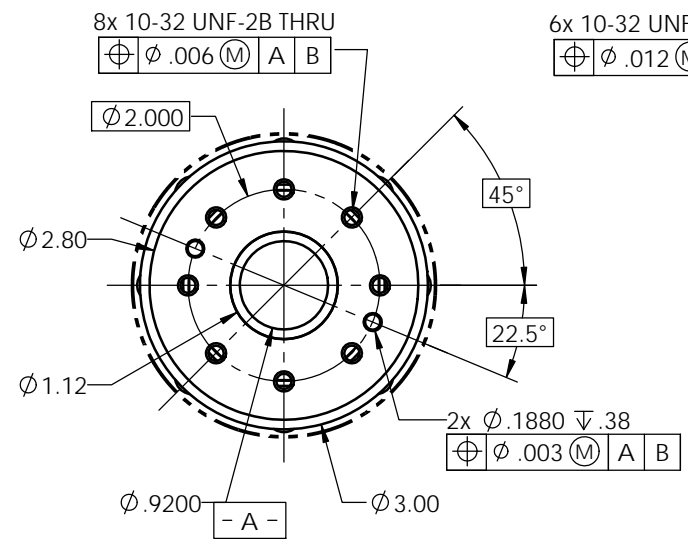
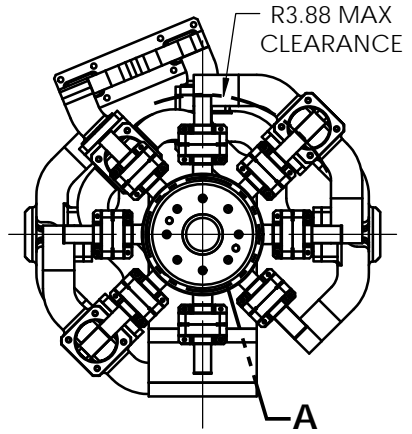
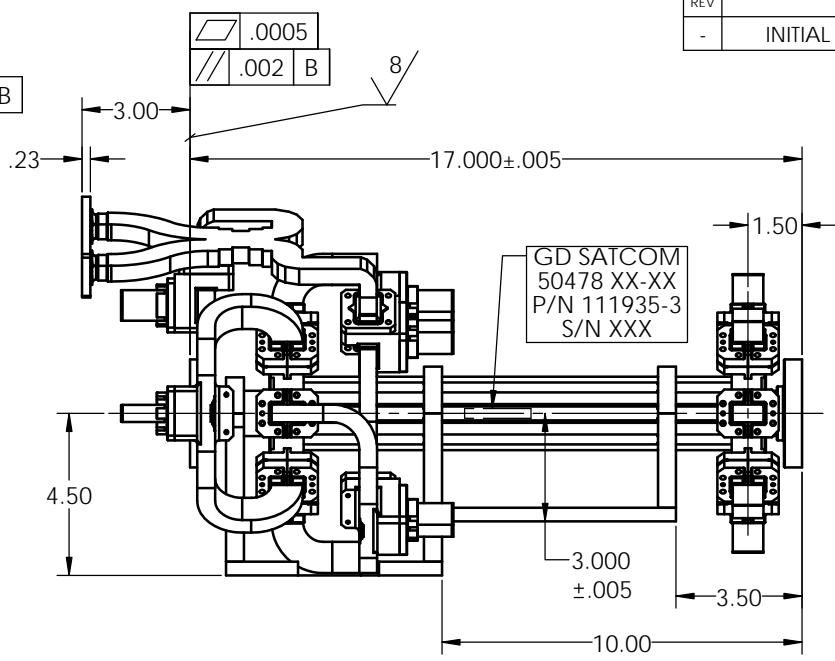
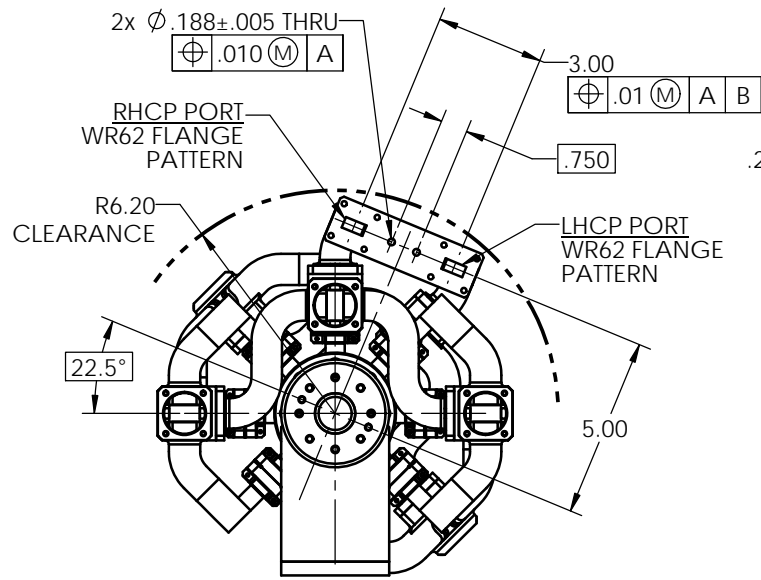
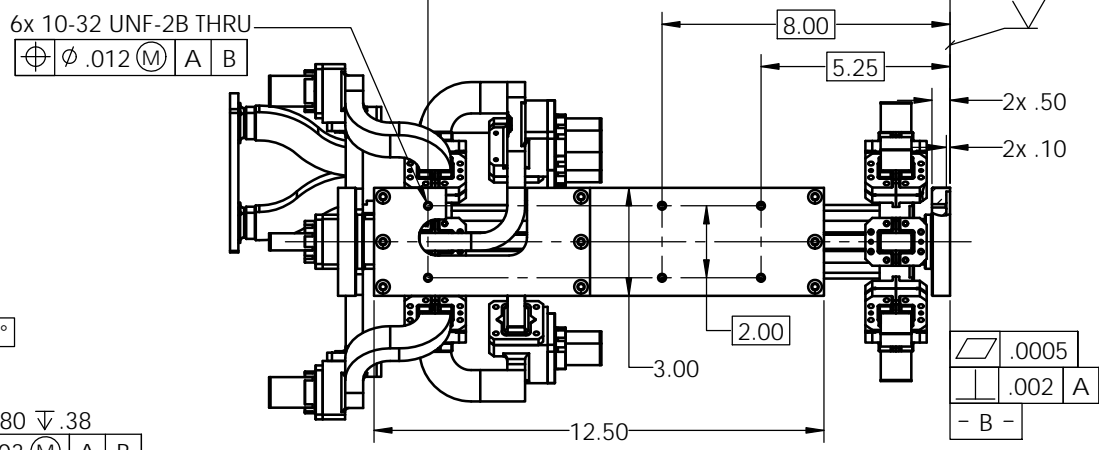


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
-	INITIAL RELEASE		



2x DETAIL A
SCALE 1 : 1



NOTES: UNLESS OTHERWISE SPECIFIED.

UNLESS OTHERWISE SPECIFIED INTERPRET DIMENSIONING & TOLERANCING PER ANSI Y14.5M-1992. DIMENSIONS ARE IN INCHES. DIMENSIONS SHOWN IN () ARE FOR REFERENCE ONLY. TOLERANCES ARE: SURFACE- TOLERANCES- 32 ✓ XX ±.01 XXX ±.003 XXXX ±.0015 ANGLES ±0°30'	APPROVALS	DATE
	DRAWN: H. Lim	04-26-12
	CHECKED:	
	RF-ENG:	
	MFG-ENG:	
MATERIAL:	ITAR CONTROLLED: Exchange, export or transfer subject to the licensing or agreement requirements of 22 CFR 120 - 130 as amended.	

GENERAL DYNAMICS PROPRIETARY			
GENERAL DYNAMICS			
SATCOM Technologies			
3111 Fujita Street, Torrance CA 90505, (310) 539-6704			
Ku-BAND TE₂₁ MONOPULSE TRACKING COUPLER, LowPIM			
SIZE	FSCM No	DWG No	REV
C	50478	111935-3	-
SCALE: 3:8		SHEET	1

SPECIFICATIONS

FREQUENCY BAND

TRACKING (DIFFERENCE) CHANNEL : 13.395 - 14.062 GHz
 DOWNLINK (SUM) CHANNEL : 13.395 - 14.062 GHz
 UPLINK (SUM) CHANNEL : 14.600 - 15.225 GHz

VSWR

TRACKING OUTPUTS : 1.40:1
 THROUGH LINE: 13.395 - 14.062 GHz : 1.05:1
 : 14.600 - 15.225 GHz : 1.05:1

INSERTION LOSS

THROUGH LINE: 13.395 - 14.062 GHz : 0.1 dB MAX
 : 14.600 - 15.225 GHz : 0.1 dB MAX
 TRACKING: 13.395 - 14.062 GHz : 1.0 dB MAX

ISOLATION

: 90 dB MIN AT 2.200 - 2.300 GHz

COUPLING

TE₁₁ MODE TO TRACK CHANNEL : 35 dB OR BETTER
 TE₂₁ MODE TO TRACK CHANNEL : 10 dB NOMINAL

DIFFERENCE CHANNEL NULL DEPTH

: 40 dB WITH RESPECT TO SUM CHANNEL PEAK

POWER HANDLING

: 2.0 kW CW MIN

PIM LEVEL

: -140 dBm MAX WITH TWO TRANSMIT SIGNALS AT
 47 dBm POWER LEVEL
 : DESIGN AND CONSTRUCTED PER BEST PRACTICES
 TO MITIGATE PIM SOURCES
 : PIM VERIFICATIONS BY ANALYSIS

POLARIZATION

: HLP and VLP

PRESSURIZATION

: SEALED TO 2.0 PSIG

LEAK RATE

: 0.5 CUBIC FT/HR MAX

TEMPERATURE

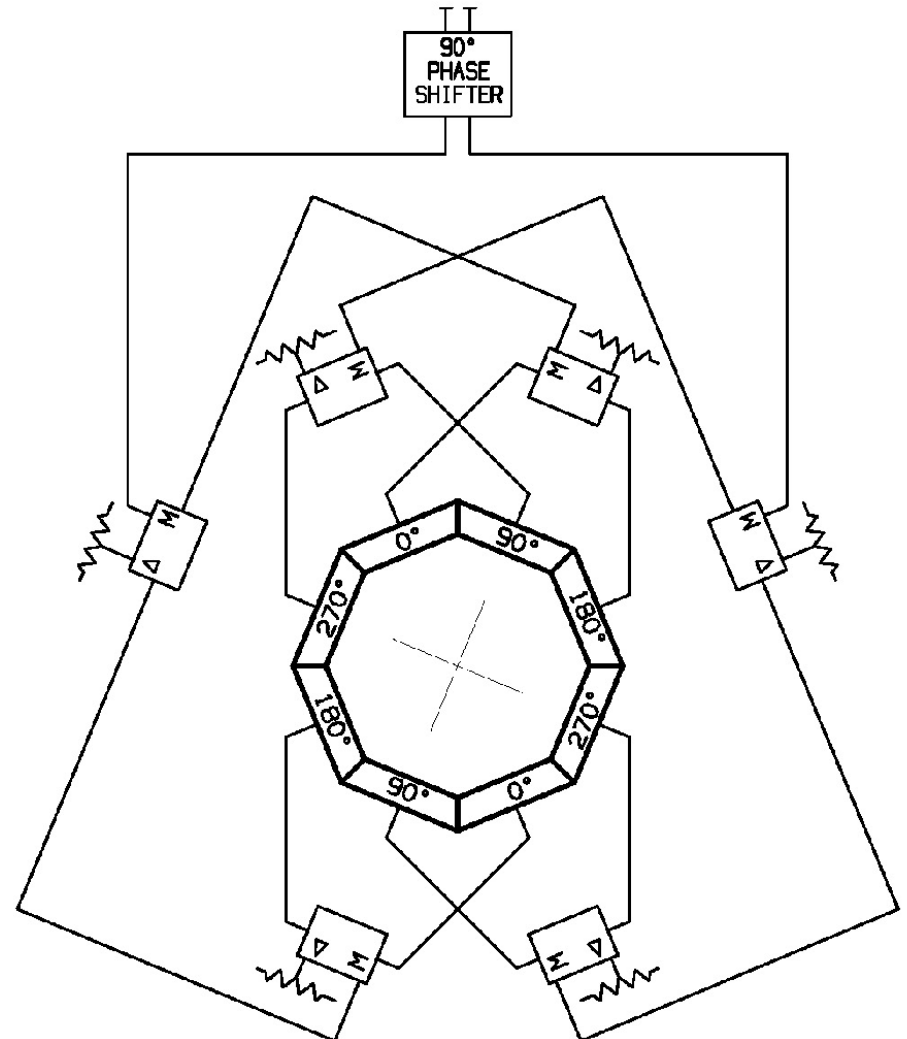
NON-OPERATING : -70°F to +160°F
 OPERATING : +50°F to +130°F

FINISH

INTERIOR AND CIRCULAR FLANGES : COPPER ALLOY
 ERROR SIGNAL PORTS : CHROMATE CONVERSION COATED
 EXTERIOR : BLACK PAINT, COLOR N_o 37038 PER FED-STD-595

ESTIMATED MASS

: 26.5 LBS



BLOCK DIAGRAM

1. ABOVE SPECIFICATIONS ARE GUARANTEED WHEN COUPLER IS TESTED WITH A LABORATORY LOAD OR A FEED HORN WITH A RETURN LOSS OF 26 dB OR BETTER.

NOTES: UNLESS OTHERWISE SPECIFIED.

SIZE	FSCM No.	DWG No.	REV
C	50478	111935-3	-
SCALE:	1:1	SHEET	2