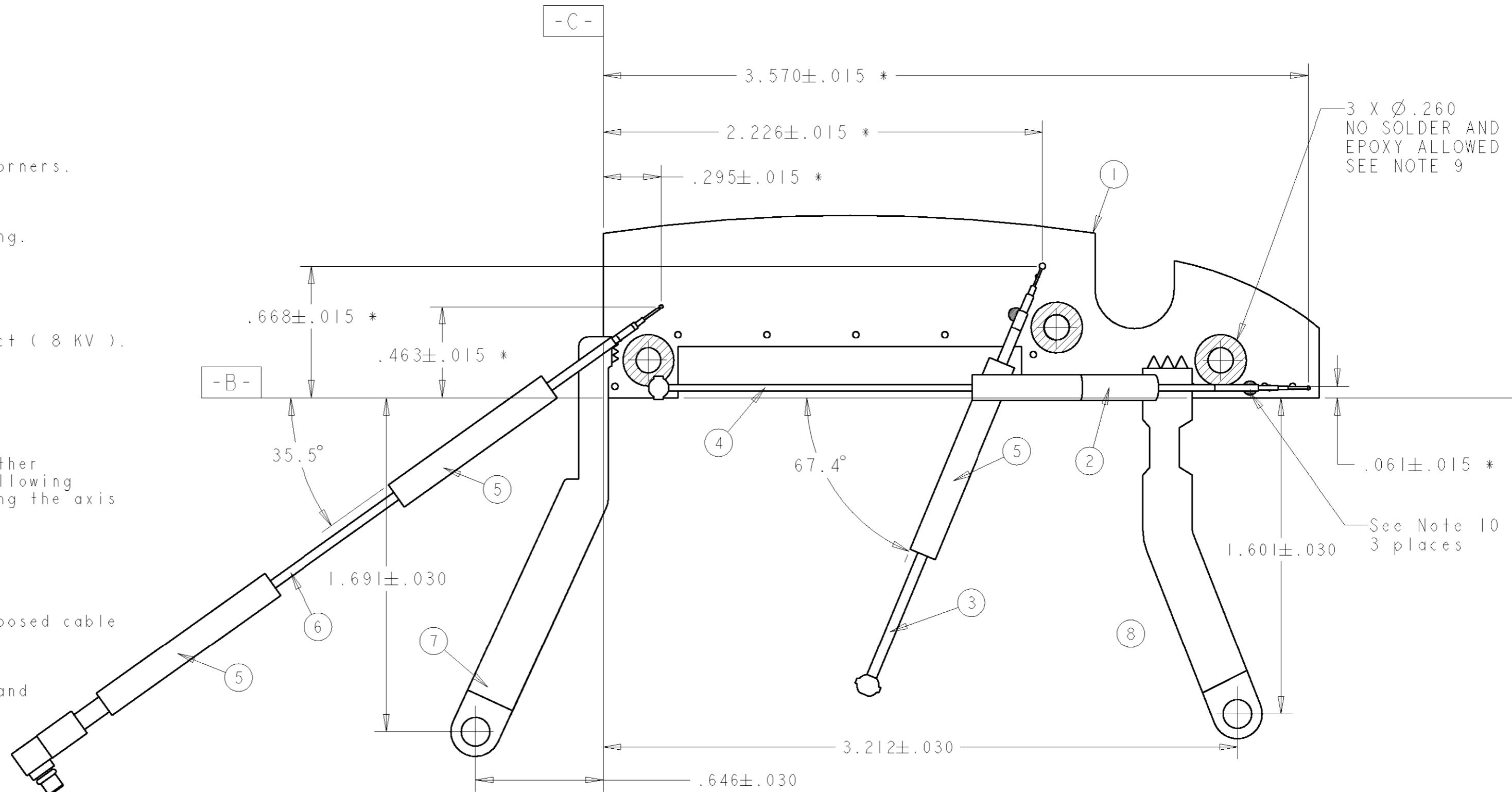


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LOC	DIST	REVISIONS					
		P	LTR	DESCRIPTION	DATE	DWN	APVD
HQ	00		7	Notes and dimensions updated	06APR2004	DJI	MAH
			8	Revised to match cust. drawing	19AUG2004	DJL	MAH
			A	Release to production	12OCT2004	DJL	MAH
			B	Cust. part number revised	06DEC2004	DJL	MAH

NOTES:

- WWAN (MMCX CABLE)  
 Frequency: 824 - 960 MHz and 1710 - 1990 MHz  
 VSWR: < 4.0:1  
 Total Gain: -5dbi average, 0 dbi peak including cable loss.
  - WLAN/BT (GSC and SSMT CABLE )  
 frequency: 2400 - 2483.5 MHz  
 VSWR: < 2.5:1  
 Total Gain: -4dbi average, 0dbi peak including cable loss.
  - Ground flex assemblies: solder as shown.
    - Material:  
 Primary side: 1mil Polyimide  
 Internal Copper: 1oz. copper exposed surfaces to be tin plated.  
 Secondary side: 1mil Polyimide.
    - Assembly:  
 Primary side, internal copper and secondary side to be permanently laminated together
    - .4064mm ( 0.016 inch ) radius allowed on 90 degree corners.
  - Temperature: -20°C (-4°F ) to + 60 °C ( + 140°F ).
  - Humidity: 0 - 100% relative humidity, including condensing.
  - Shock: 3000 G's.
  - Vibration: 6 GRMS random vibration.
  - ESD: IEC 61000 - 4 - 2 ESD level 4 air ( 15 KV ), contact ( 8 KV ).
  - Area indicated to be free of solder and epoxy.
  - Apply 3M DP - 190 A/B epoxy adhesive to strain relief WWAN - MMCX, BT/802, II-SSMT and GSC cable assemblies. Epoxy bead shall be .125±.025 inch in diameter and bridge from one side of the wire to the other and cover the top of the wire. To be applied at the following distance away from the end tip of center conductor along the axis of the cable:
    - WWAN - MMCX Cable assembly: .330±.020 inch
    - WLAN/BT SSMT Cable assembly: .270±.020 inch
    - WLAN/BT GSC Cable assembly: .300±.020 inch
  - Dimension shown is to the tip of center conductor. Exposed cable shield and center conductor shall be soldered to its respective solder pads.
  - Silkscreen approximately where shown with 10-64160-03 and latest revision level.
  - Workmanship per Symbol standard SS-03800-57.
  - Package per STI general packing spec 50-04100-013.
- \* See note 11.



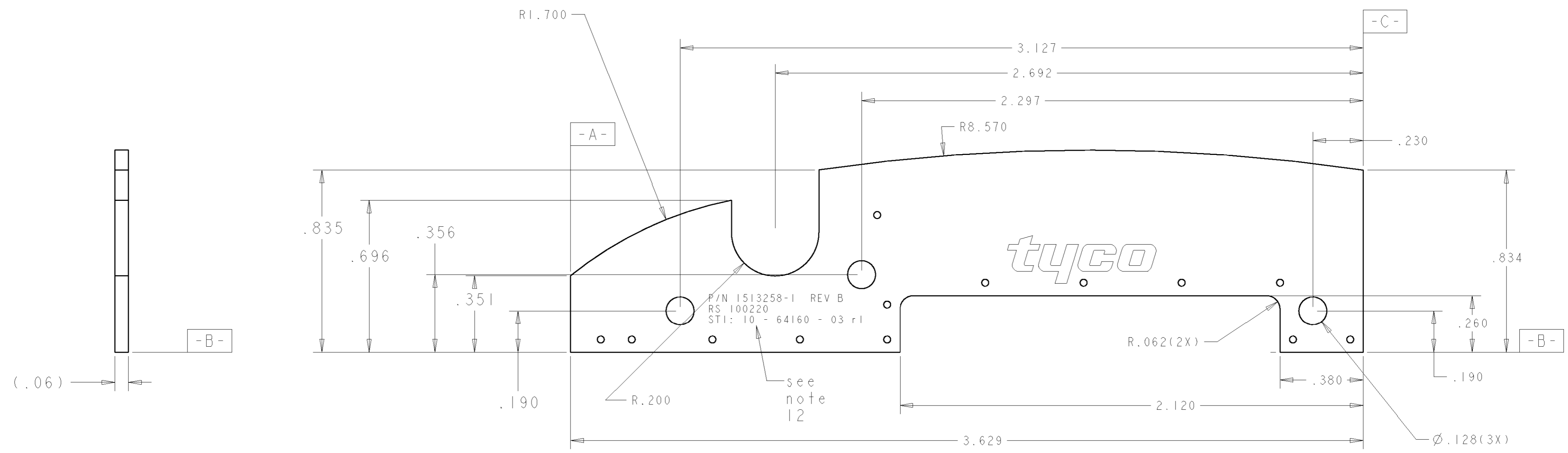
1513258-1  
 SCALE 2:1

8	1513289-1	FLEX CIRCUIT 1	1
7	1513290-1	FLEX CIRCUIT 2	1
6	1713526-1	WWAN-MMCX (CABLE)	1
5	1513269	CAPCON-LST-050	2.26 inches
4	1513270-1	WLAN/BT GSC (CABLE)	1
3	1408494-1	WLAN/BT SSMT(CABLE)	1
2	1513268	CAPCON-LST-040	1.10 inches
1	1513258-2	PRINTED CIRCUIT BOARD	1
ITEM	PART NUMBER	PART DESCRIPTION	QTY.

DIMENSIONS:		TOLERANCES UNLESS OTHERWISE SPECIFIED:		DWN		tyco		Tyco Electronics	
INCHES		0 PLC ±.1	±°	DJI	06DEC2004	Electronics		Rochester, New York 14623	
MATERIAL		1 PLC ±.05		CHK	-	NAME		Symbol Aquarius	
		2 PLC ±.01		APVD	-	PRODUCT SPEC		Antenna Module	
		3 PLC ±.005		APPLICATION SPEC		SIZE		RESTRICTED TO	
		4 PLC ±.001		WEIGHT		CAGE CODE		-	
		FINISH		CUSTOMER DRAWING		DRAWING NO		-	
						A200779		-	
						G=1513258			
						SCALE		SHEET 1 OF 3	
						REV		B	

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LOC	DIST	REVISIONS					
		P	LTR	DESCRIPTION	DATE	DWN	APVD
HQ	00	-	-	SEE SHEET 1	-	-	-



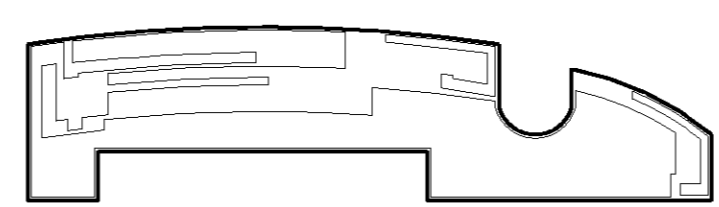
P/N 1513258-1 REV B  
 RS 100220  
 STI: 10 - 64160 - 03 r1

*tyco*

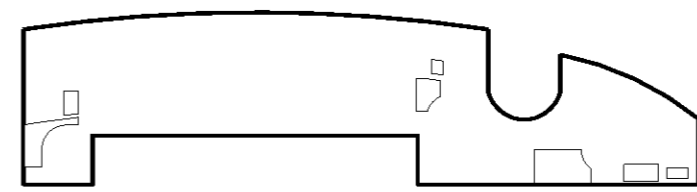
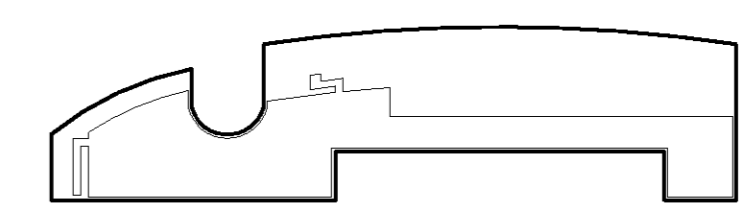
1513258-2  
 SCALE 3:1

NOTES: UNLESS OTHERWISE SPECIFIED:

- FABRICATE TO MEET IPC - 6012, CLASS 2. INSPECT TO MEET IPC - A - 600, CLASS 2.
- PRIMARY SIDE ( LAYER 1 ) SHOWN.
- MATERIAL: GETEK 8 PLY ( 7628 ) .059 THK. P/N ML200D, 1/2 OZ COPPER, BOTH SIDES. DIELECTRIC CONSTANT @ 1MHZ 4.2 ± 0.1.
- PLATING TO BE 1/2 OZ COPPER.
- FINISH:  
 A: SOLDER MASK OVER BARE COPPER. ( SMOBC ).  
 B: MASK BOTH SIDES OF PCB WITH LPI SOLDERMASK, SOLDERMASK COLOR: NATURAL GREEN.  
 C: HASL.
- TOTAL BOARD THICKNESS INCLUDING PLATING, .062 ± .005mm.
- A: SILKSCREEN TO BE NON-WHITE EPOXY INK.  
 B: SILKSCREEN VENDOR LOGO LAYER 2. DO NOT ETCH. MARKING MUST BE SILKSCREENED ONLY ( LAYER 2 ) NO ADDED ETCH ALLOWED.
- TRACE WIDTH TO BE: EXACT DIMENSIONS AS ARTWORK. TOL. ± .001.
- LAYER TO LAYER REGISTRATION TO BE ± .005.
- DIMENSIONS ARE IN INCHES.
- REFER TO GERBER FILE: 100220\_REVB\_GERBERS.ZIP FOR PCB MANUFACTURE.



CIRCUIT LAYOUT FOR REFERENCE ONLY

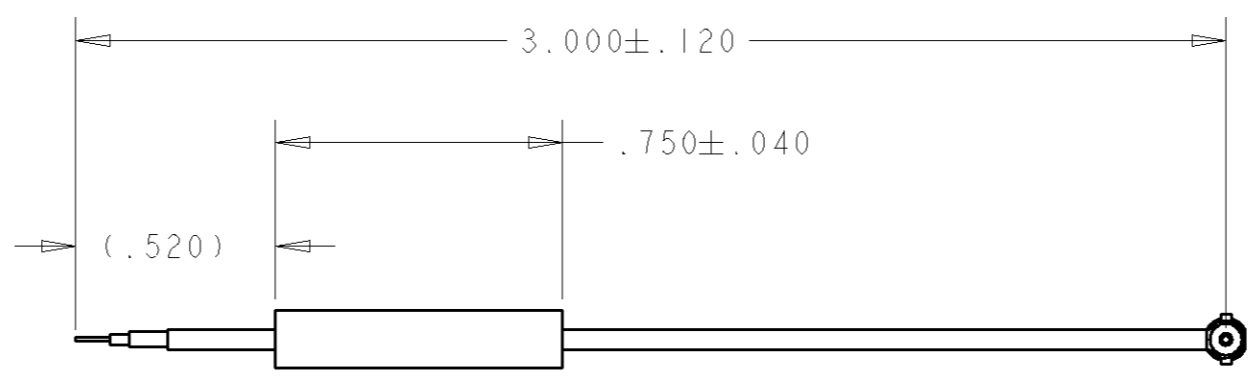


SOLDER MASK LAYOUT FOR REFERENCE ONLY

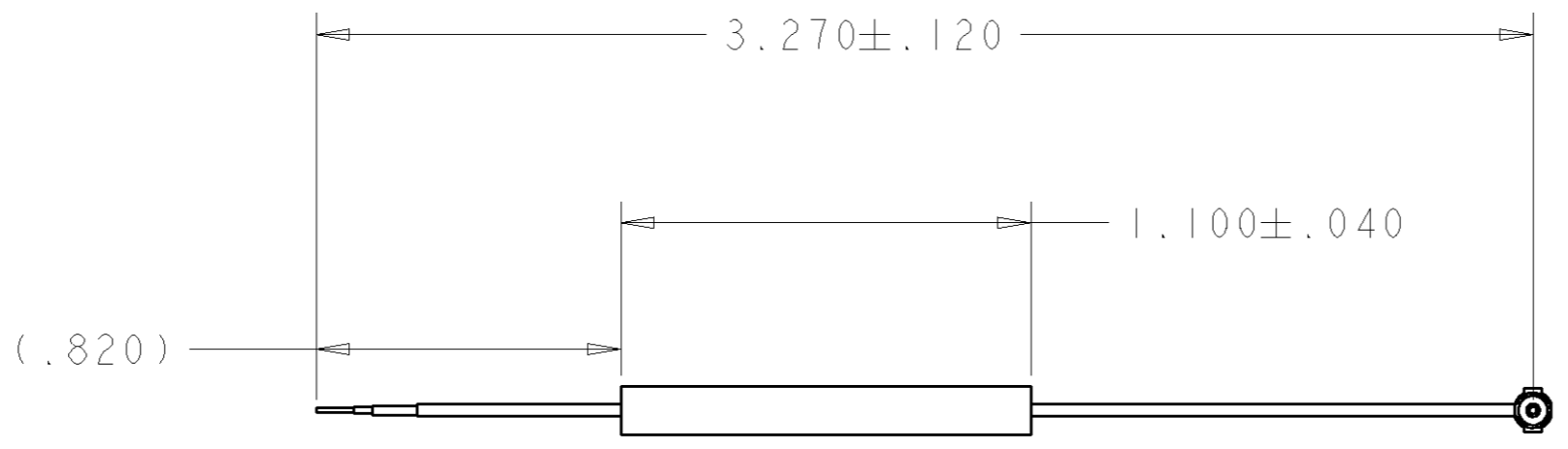
THIS DRAWING IS A CONTROLLED DOCUMENT FOR TYCO ELECTRONICS CORPORATION. IT IS SUBJECT TO CHANGE AND THE CONTROLLING ENGINEERING ORGANIZATION SHOULD BE CONTACTED FOR THE LATEST REVISION.		DWN D.JL	06DEC2004	<b>tyco</b> Tyco Electronics Rochester, New York 14623	
DIMENSIONS: INCHES		CHK -	APVD -	NAME Symbol Aquarius Antenna Module	
TOLERANCES UNLESS OTHERWISE SPECIFIED: 0 PLC ±.1 1 PLC ±.05 2 PLC ±.01 3 PLC ±.005 4 PLC ±.001 ANGLES ±° FINISH		PRODUCT SPEC -	APPLICATION SPEC -	SIZE A2	CAGE CODE 00779
MATERIAL -		WEIGHT -	DRAWING NO 1513258	RESTRICTED TO -	
CUSTOMER DRAWING		SCALE 1:1	SHEET 2	OF 3	REV B

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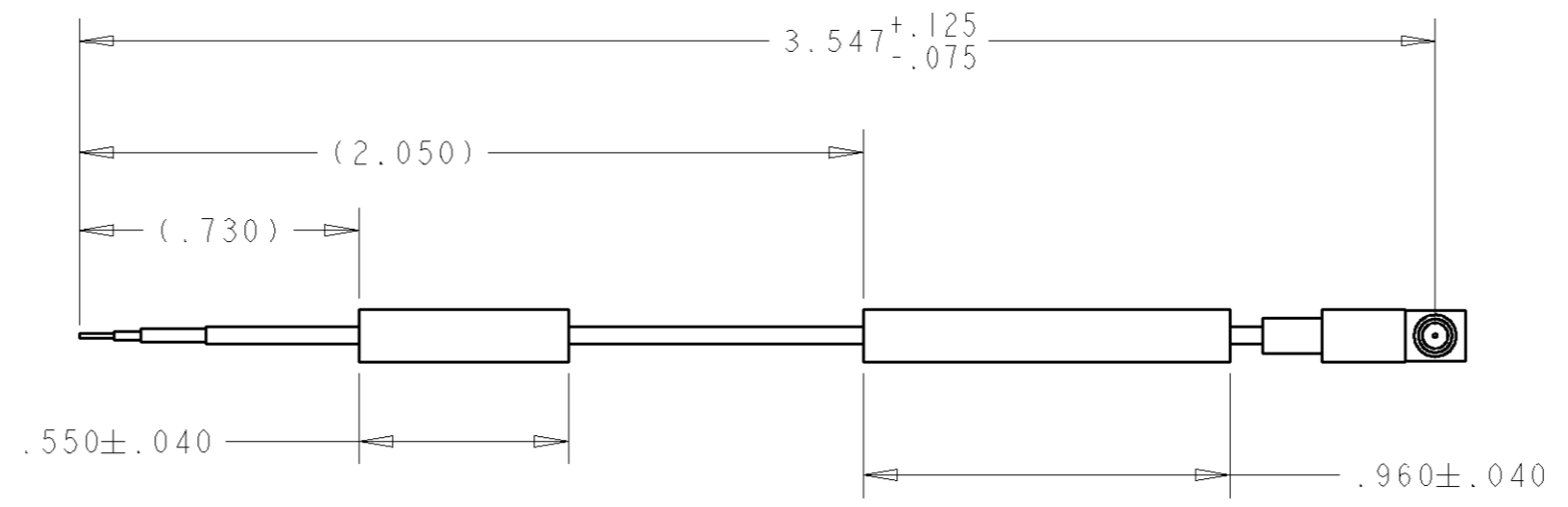
LOC	DIST	REVISIONS					
		P	LTR	DESCRIPTION	DATE	DWN	APVD
HQ	00	-	-	SEE SHEET 1	-	-	-



WLAN/BT SSMT CABLE ASSEMBLY  
 SCALE 2:1



WLAN/BT GSC CABLE ASSEMBLY  
 SCALE 2:1



WWAN - MMCX CABLE ASSEMBLY  
 SCALE 2:1

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DIMENSIONS: INCHES		CHK -	-	NAME Symbol Aquarius Antenna Module	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		APVD -	-	PRODUCT SPEC -	
0 PLC ± .1		APPLICATION SPEC -		SIZE A200779	
1 PLC ± .05		WEIGHT -		CAGE CODE C-1513258	
2 PLC ± .01		CUSTOMER DRAWING		DRAWING NO. -	
3 PLC ± .005		SCALE 1:1		RESTRICTED TO -	
4 PLC ± .001		SHEET 3 OF 3		REV B	
ANGLES ±°					
FINISH -					