

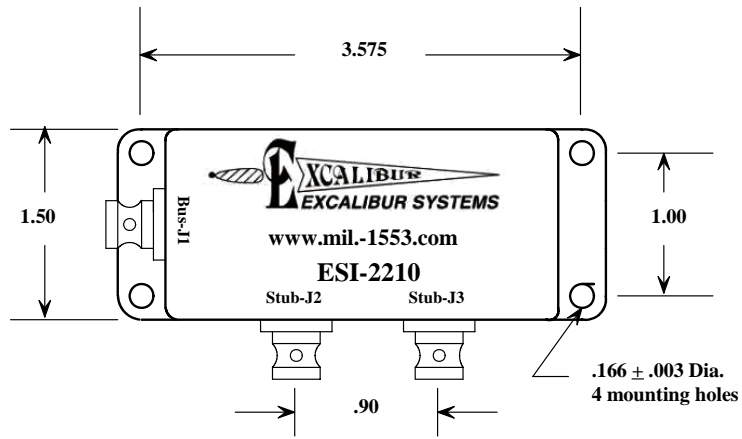


SPECIFICATIONS for INTERNALLY TERMINATED COUPLERS

Ordering Information

STUBS	P/N ONE TERMINATION	P/N TWO TERMINATIONS	CONNECTOR and MATING CONNECTOR	REFERENCE FIGURE
2	ESI-2210	ESI-2310	BJ770/PL75	1/2
2	ESI-2220	ESI-2320	BJ377/PL375	1/2
2	ESI-2230	ESI-2330	BJ157/PL150	1/2
2	ESI-2240	ESI-2340	BJ3157/PL3150	1/2
2	ESI-2250	ESI-2350	BJ77FL/PL75FL	1/2
3	ESI-3210	ESI-3310	BJ770/PL75	3/4
3	ESI-3220	ESI-3320	BJ377/PL375	3/4
3	ESI-3230	ESI-3330	BJ157/PL150	3/4
3	ESI-3240	ESI-3340	BJ3157/PL3150	3/4
3	ESI-3250	ESI-3350	BJ77FL/PL75FL	3/4
4	ESI-4210	ESI-4310	BJ770/PL75	5/6
4	ESI-4220	ESI-4320	BJ377/PL375	5/6
4	ESI-4230	ESI-4330	BJ157/PL150	5/6
4	ESI-4240	ESI-4340	BJ3157/PL3150	5/6
4	ESI-4250	ESI-4350	BJ77FL/PL75FL	5/6
5	ESI-5210	ESI-5310	BJ770/PL75	7/8
5	ESI-5220	ESI-5320	BJ377/PL375	7/8
5	ESI-5230	ESI-5330	BJ157/PL150	7/8
5	ESI-5240	ESI-5340	BJ3157/PL3150	7/8
5	ESI-5250	ESI-5350	BJ77FL/PL75FL	7/8
6	ESI-6210	ESI-6310	BJ770/PL75	9/10
6	ESI-6220	ESI-6320	BJ377/PL375	9/10
6	ESI-6230	ESI-6330	BJ157/PL150	9/10
6	ESI-6240	ESI-6340	BJ3157/PL3150	9/10
6	ESI-6250	ESI-6350	BJ77FL/PL75FL	9/10
8	ESI-8210	ESI-8310	BJ770/PL75	11/12
8	ESI-8220	ESI-8320	BJ377/PL375	11/12
8	ESI-8230	ESI-8330	BJ157/PL150	11/12
8	ESI-8240	ESI-8340	BJ3157/PL3150	11/12
8	ESI-8250	ESI-8350	BJ77FL/PL75FL	11/12
8	ESI-8211	ESI-8311	BJ770/PL75	13/14
8	ESI-8221	ESI-8321	BJ377/PL375	13/14
8	ESI-8231	ESI-8331	BJ157/PL150	13/14
8	ESI-8241	ESI-8341	BJ3157/PL3150	13/14
8	ESI-8251	ESI-8351	BJ77FL/PL75FL	13/14
8	ESI-8212	ESI-8312	BJ770/PL75	15/16
8	ESI-8222	ESI-8322	BJ377/PL375	15/16
8	ESI-8232	ESI-8332	BJ157/PL150	15/16
8	ESI-8242	ESI-8342	BJ3157/PL3150	15/16
8	ESI-8252	ESI-8352	BJ77FL/PL75FL	15/16

SPECIFICATIONS for INTERNALLY TERMINATED COUPLERS



ALL DIMENSIONS IN INCHES

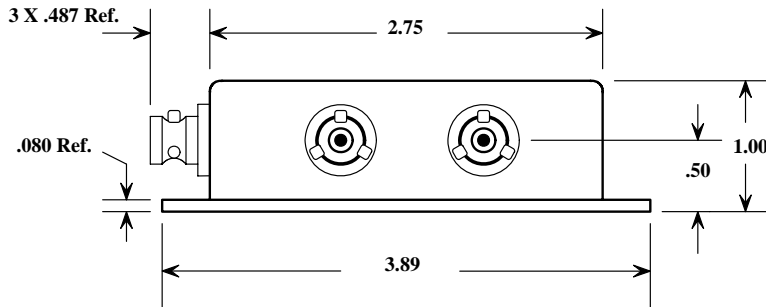
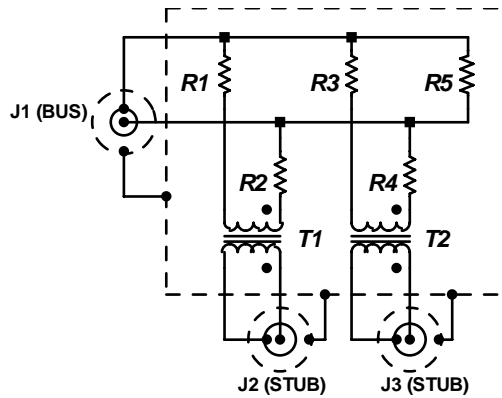


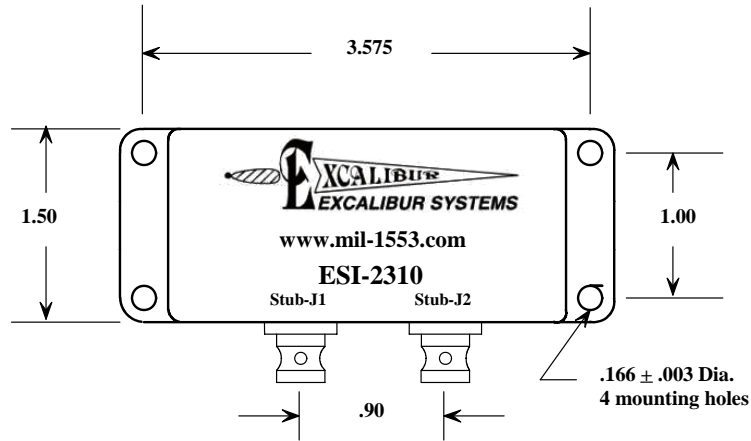
figure 1 (ESI-2210)



R1 - R4 = 59 Ohms, 1%, 2W
 R5 = 78 Ohms, 1%, 2W
 T1 - T2 = TURNS RATIO 1 : 1.41

**SCHEMATIC DIAGRAM
 TWO STUB ONE INTERNAL TERMINATION**

SPECIFICATIONS for INTERNALLY TERMINATED COUPLERS



ALL DIMENSIONS IN INCHES

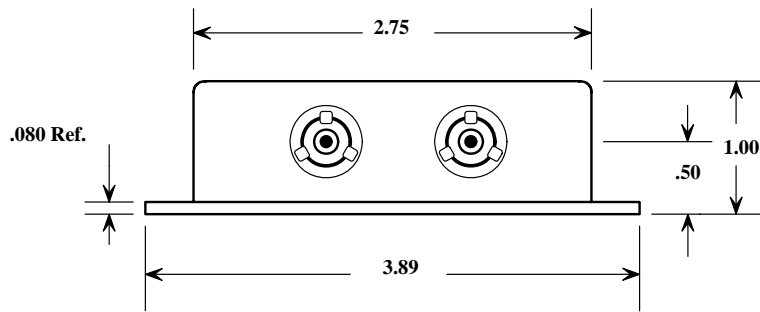
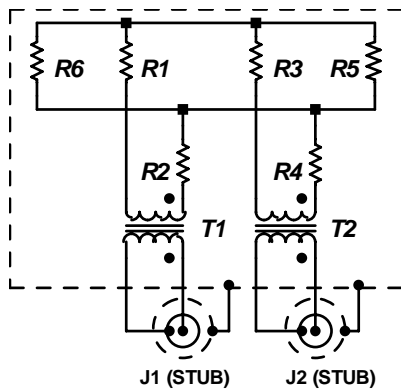


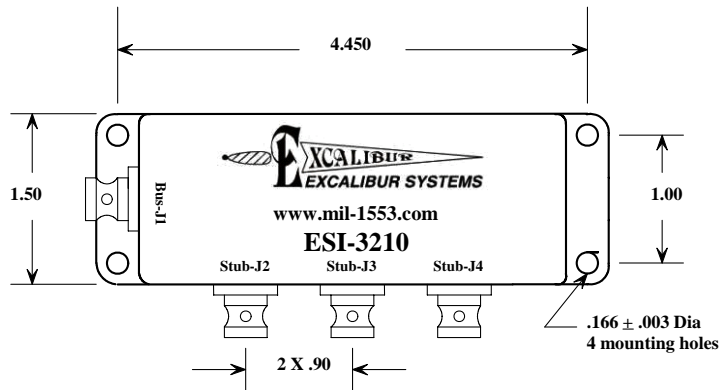
figure 2 (ESI-2310)



R1 - R4 = 59 Ohms, 1%, 2W
 R5 - R6 = 78 Ohms, 1%, 2W
 T1 - T2 = TURNS RATIO 1 : 1.41

**SCHEMATIC DIAGRAM
 TWO STUB INTERNAL BUS**

SPECIFICATIONS for INTERNALLY TERMINATED COUPLERS



ALL DIMENSIONS IN INCHES

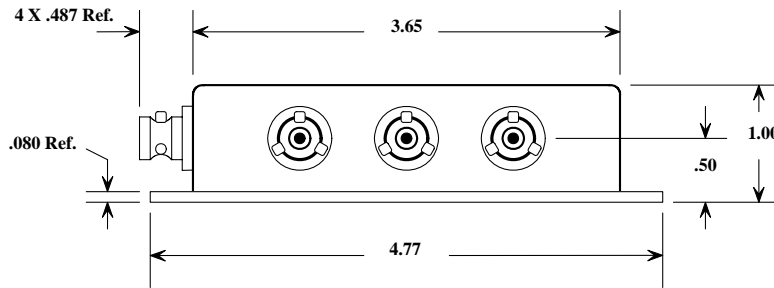
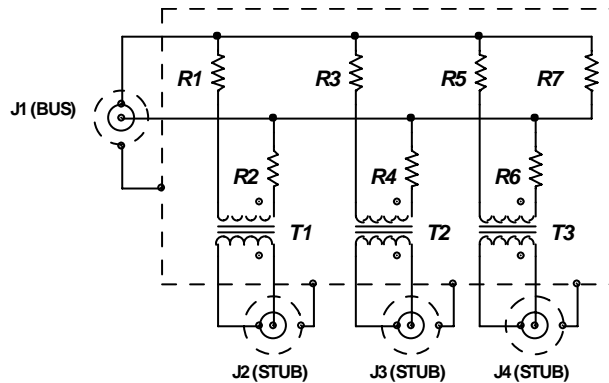


figure 3 (ESI-3210)



R1 - R6 = 59 Ohms, 1%, 2W
 R7 = 78 Ohms, 1%, 2W
 T1 - T3 = TURNS RATIO 1 : 1.41

**SCHEMATIC DIAGRAM
 THREE STUB ONE INTERNAL TERMINATION**

SPECIFICATIONS for INTERNALLY TERMINATED COUPLERS

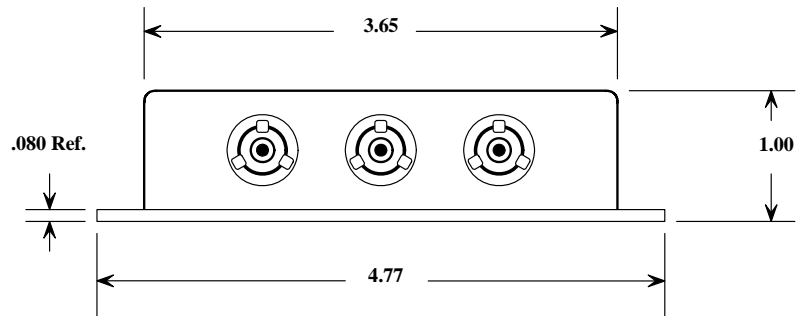
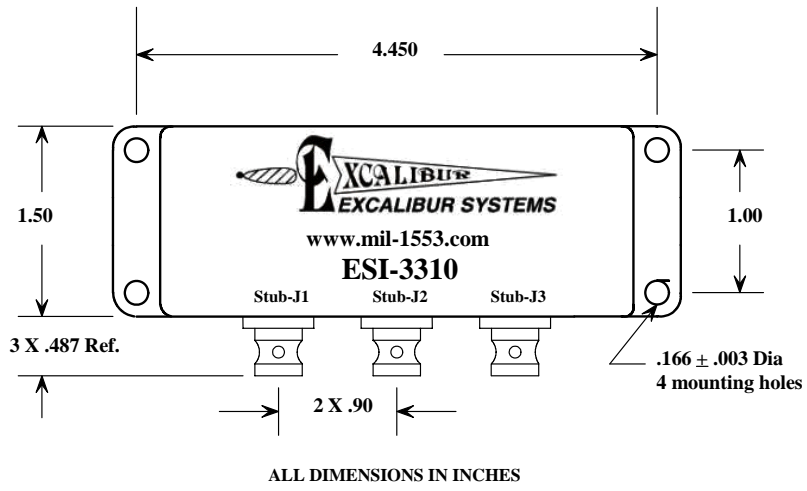
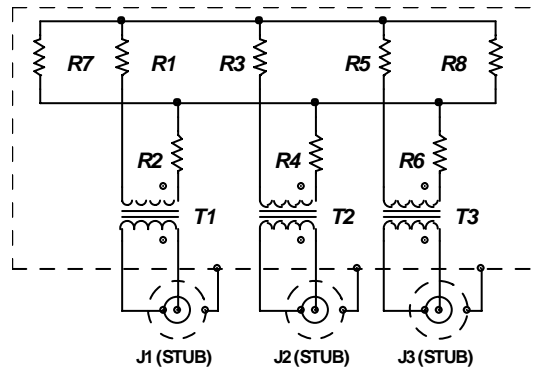


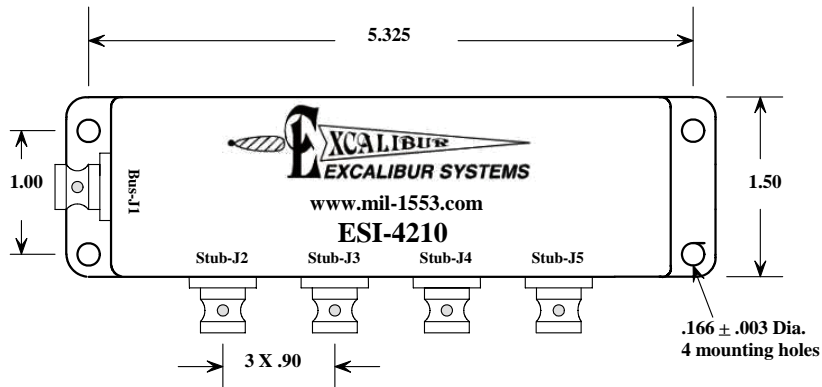
figure 4 (ESI-3310)



R1 - R6 = 59 Ohms, 1%, 2W
 R7 - R8 = 78 Ohms, 1%, 2W
 T1 - T3 = TURNS RATIO 1 : 1.41

**SCHMATIC DIAGRAM
 THREE STUB INTERNAL BUS**

SPECIFICATIONS for INTERNALLY TERMINATED COUPLERS



ALL DIMENSIONS IN INCHES

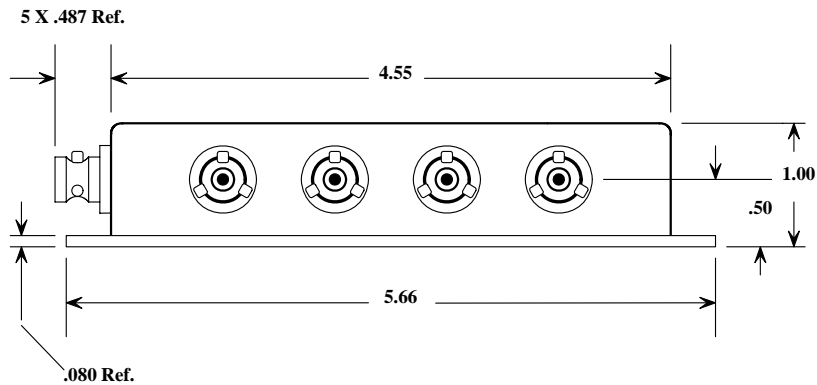
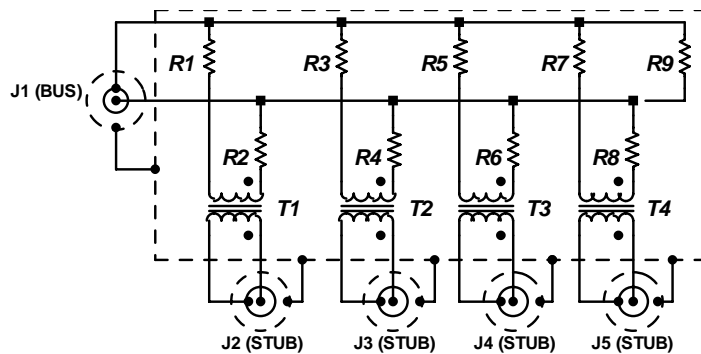


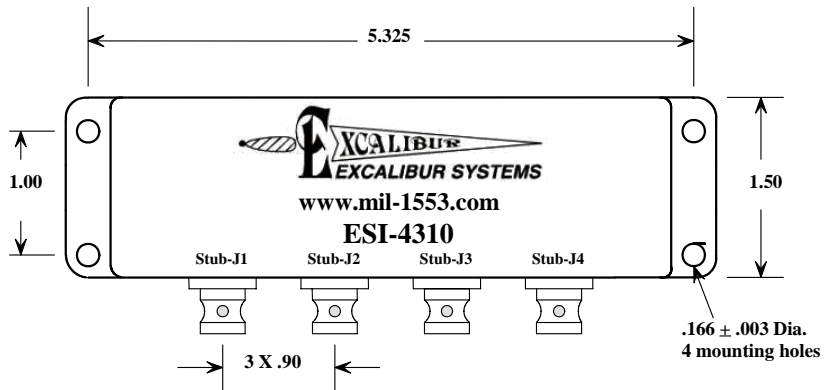
figure 5 (ESI-4210)



R1 - R8 = 59 Ohms, 1%, 2W
 R9 = 78 Ohms, 1%, 2W
 T1 - T4 = TURNS RATIO 1 : 1.41

**SCHEMATIC DIAGRAM
 FOUR STUB ONE INTERNAL TERMINATION**

SPECIFICATIONS for INTERNALLY TERMINATED COUPLERS



ALL DIMENSIONS IN INCHES

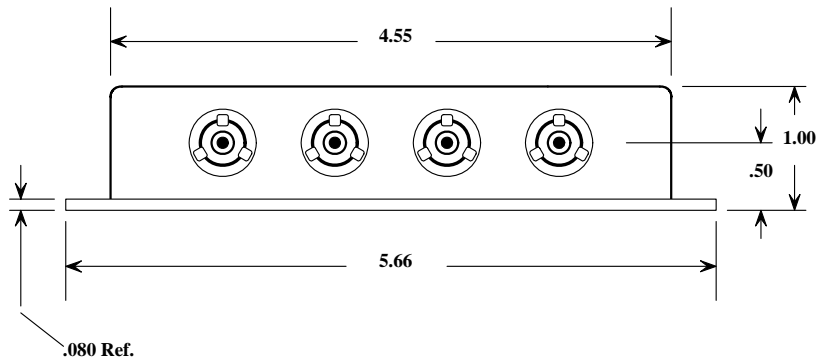
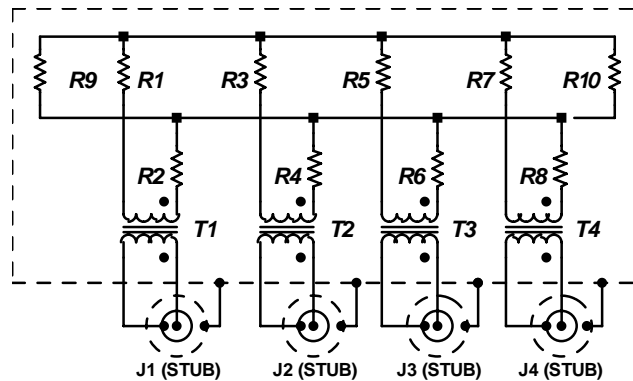


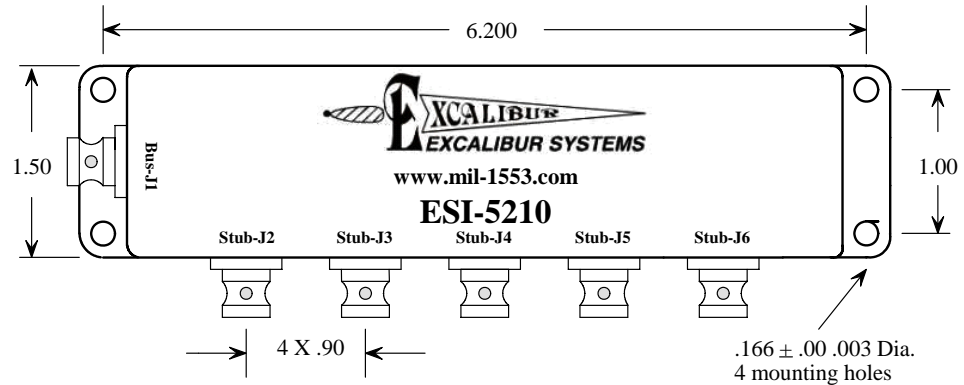
figure 6 (ESI-4310)



R1 - R8 = 59 Ohms, 1%, 2W
 R9 - R10 = 78 Ohms, 1%, 2W
 T1 - T4 = TURNS RATIO 1 : 1.41

**SCHEMATIC DIAGRAM
 FOUR STUB INTERNAL BUS**

SPECIFICATIONS for INTERNALLY TERMINATED COUPLERS



ALL DIMENSIONS IN INCHES

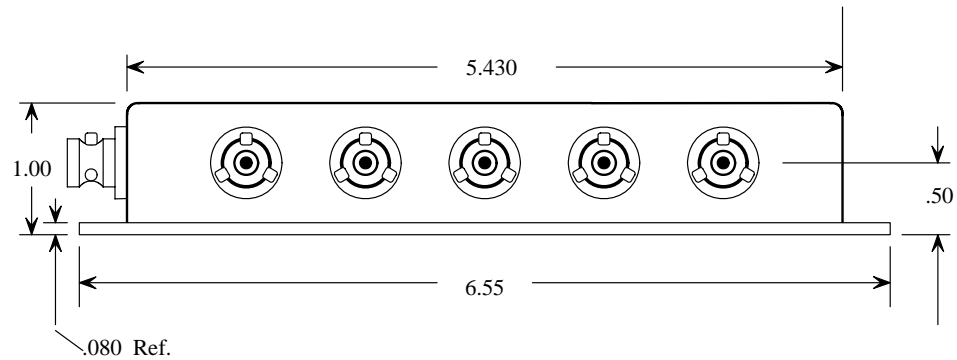
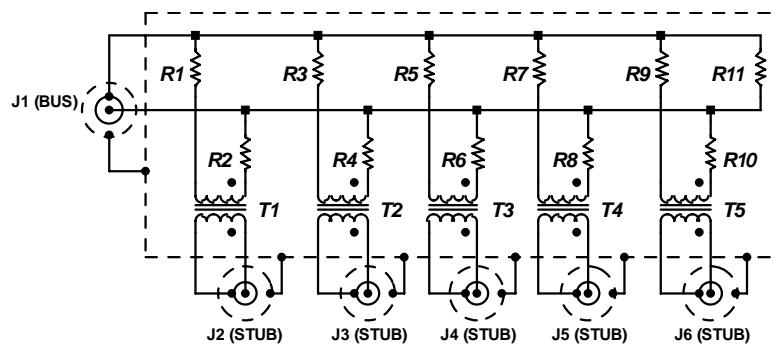


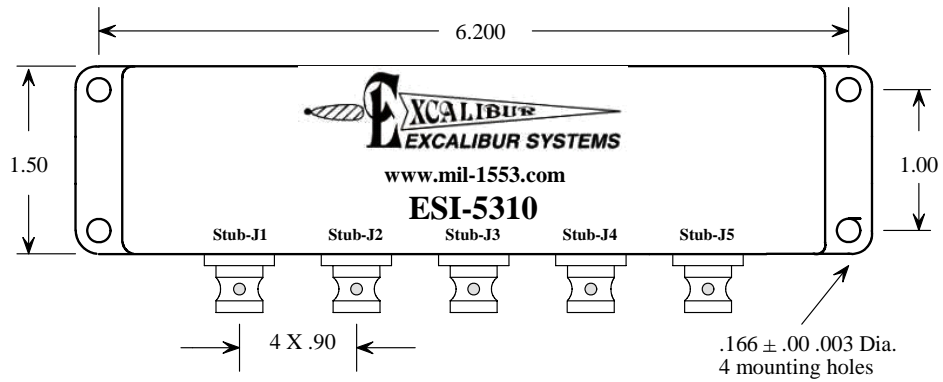
figure 7 (ESI-5210)



R1 - R10 = 59 Ohms, 1%, 2W
 R11 = 78 Ohms, 1%, 2W
 T1 - T5 = TURNS RATIO 1 : 1.41

**SCHEMATIC DIAGRAM
 FIVE STUB ONE INTERNAL TERMINATION**

SPECIFICATIONS for INTERNALLY TERMINATED COUPLERS



ALL DIMENSIONS IN INCHES

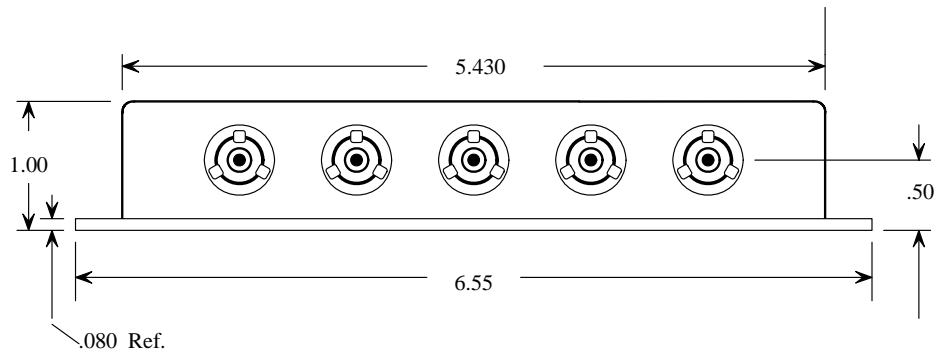
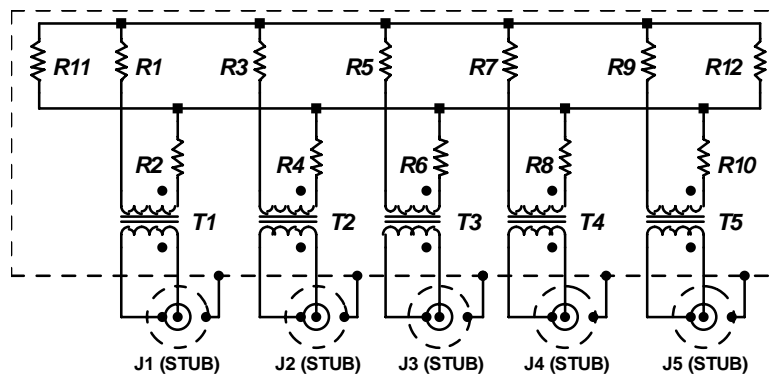


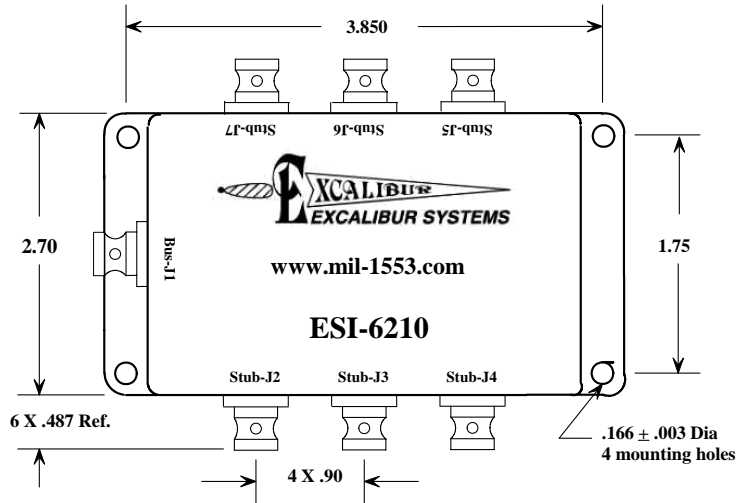
figure 8 (ESI-5310)



R1 - R10 = 59 Ohms, 1%, 2W
 R11- R12 = 78 Ohms, 1%, 2W
 T1 - T5 = TURNS RATIO 1 : 1.41

**SCHEMATIC DIAGRAM
 FIVE STUB INTERNAL BUS**

SPECIFICATIONS for INTERNALLY TERMINATED COUPLERS



ALL DIMENSIONS IN INCHES

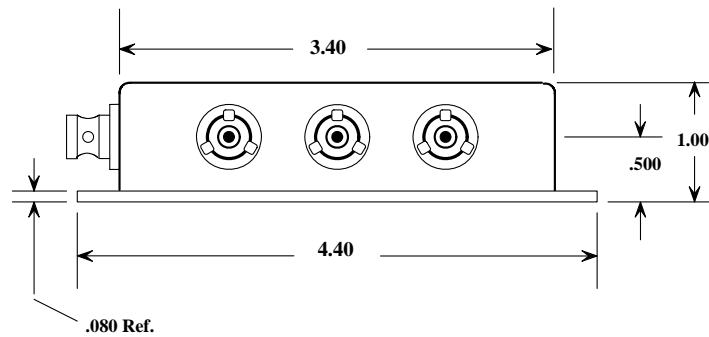
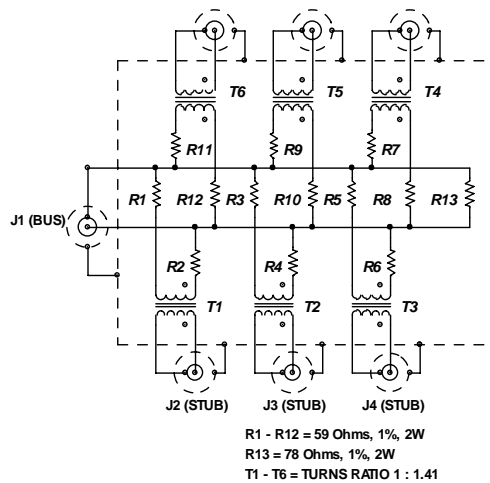
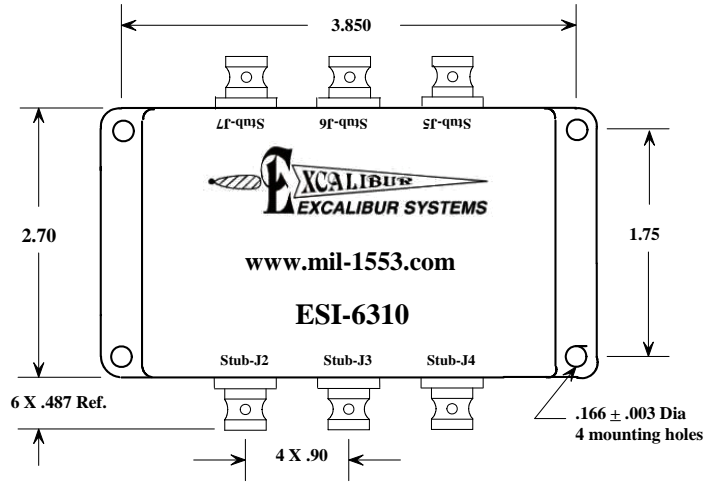


figure 9 (ESI-6210)



**SCHAMATIC DIAGRAM
SIX STUB ONE INTERNAL TERMINATION**

SPECIFICATIONS for INTERNALLY TERMINATED COUPLERS



ALL DIMENSIONS IN INCHES

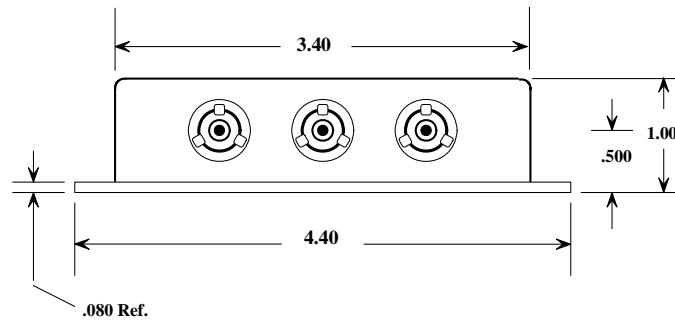
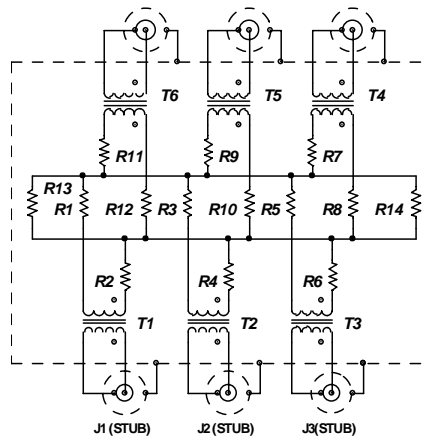


figure 10 (ESI-6310)



R1 - R12 = 59 Ohms, 1%, 2W
 R13 - R14 = 78 Ohms, 1%, 2W
 T1 - T6 = TURNS RATIO 1 : 1.41

**SCHEMATIC DIAGRAM
 SIX STUB INTERNAL BUS**

SPECIFICATIONS for INTERNALLY TERMINATED COUPLERS

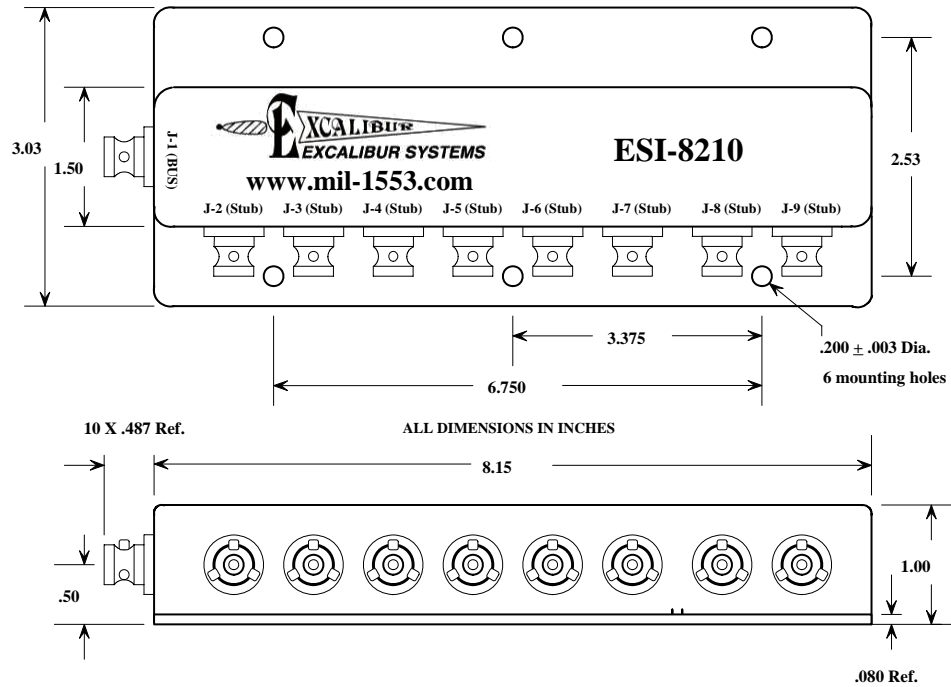
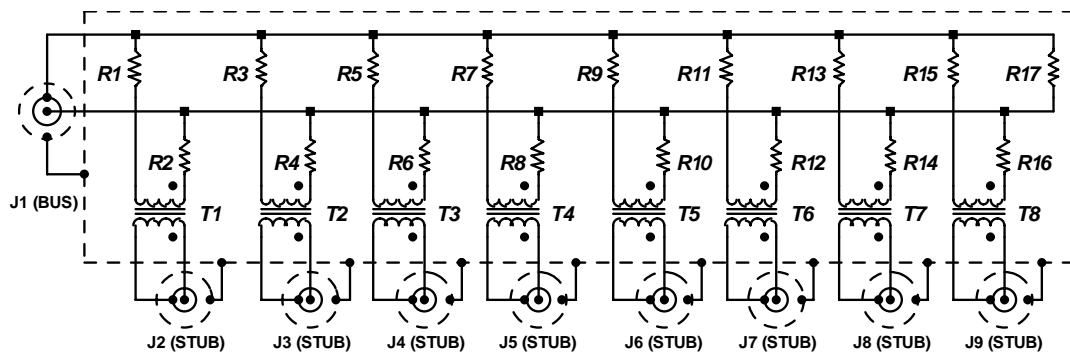


figure 11 (ESI-8210)



R1 - R16 = 59 Ohms, 1%, 2W
R17 = 78 Ohms, 1%, 2W
T1 - T8 = TURNS RATIO 1 : 1.41

**SCHAMATIC DIAGRAM
EIGHT STUB ONE INTERNAL TERMINATION**

SPECIFICATIONS for INTERNALLY TERMINATED COUPLERS

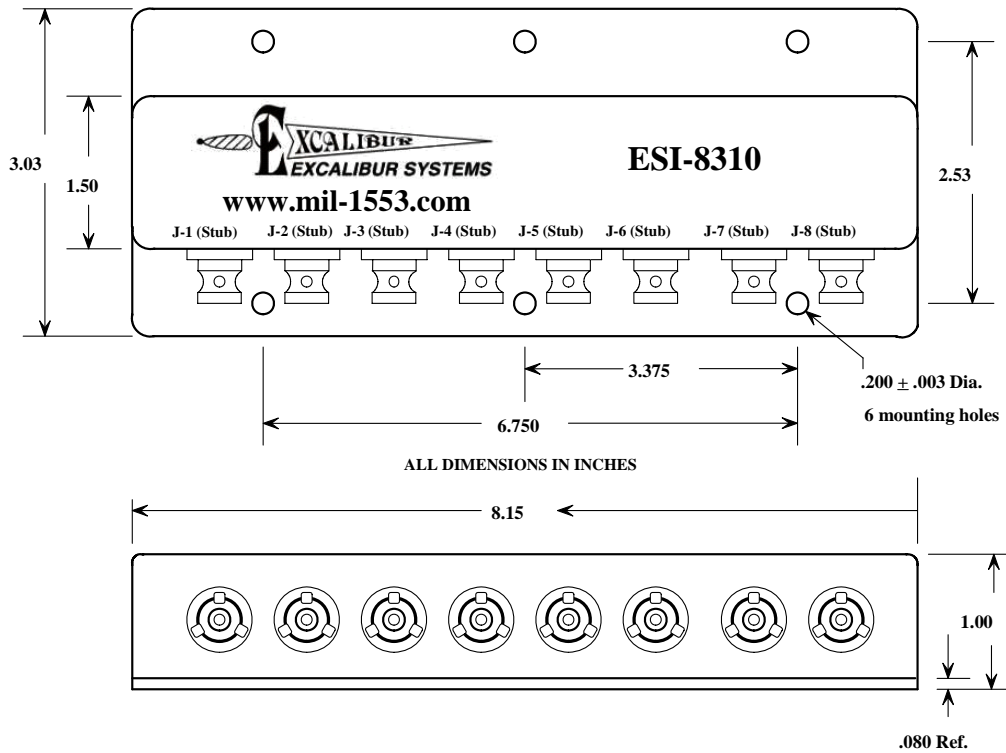
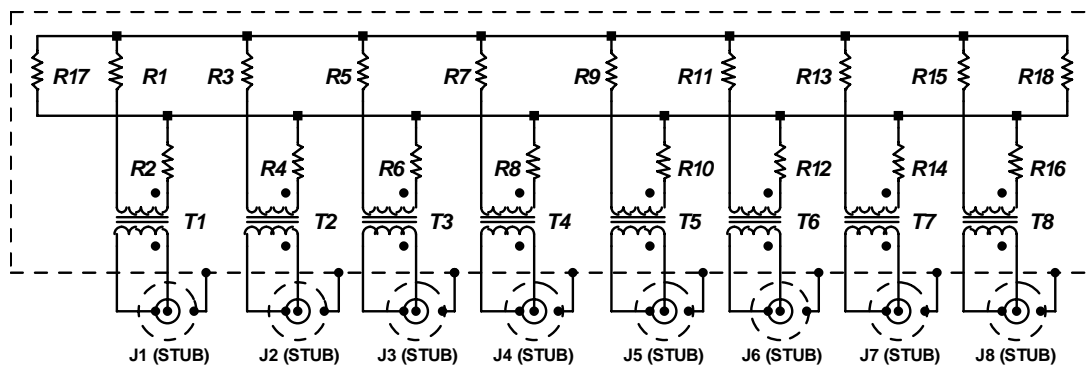


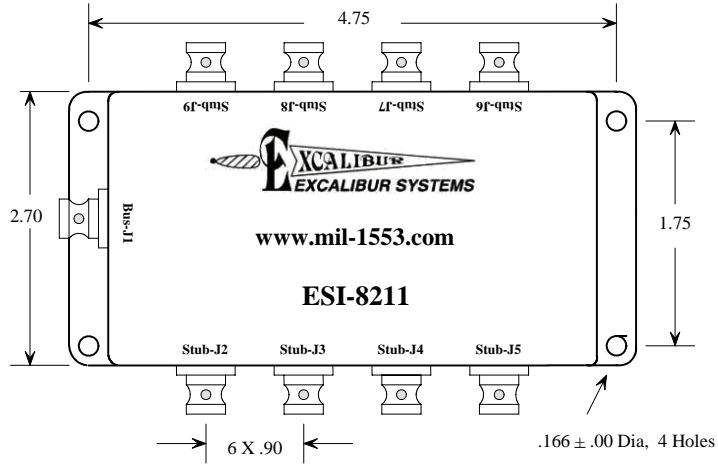
figure 12 (ESI-8310)



R1 - R16 = 59 Ohms, 1%, 2W
 R17 - R18 = 78 Ohms, 1%, 2W
 T1 - T8 = TURNS RATIO 1 : 1.41

**SCHEMATIC DIAGRAM
 EIGHT STUB INTERNAL BUS**

SPECIFICATIONS for INTERNALLY TERMINATED COUPLERS



ALL DIMENSIONS IN INCHES

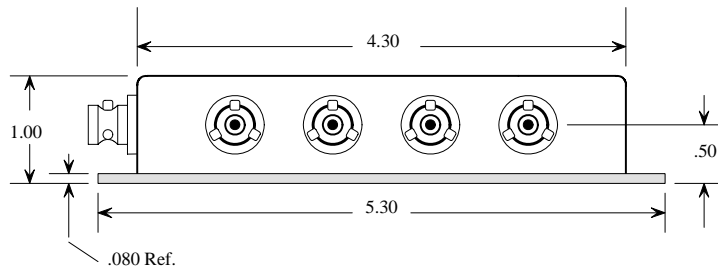
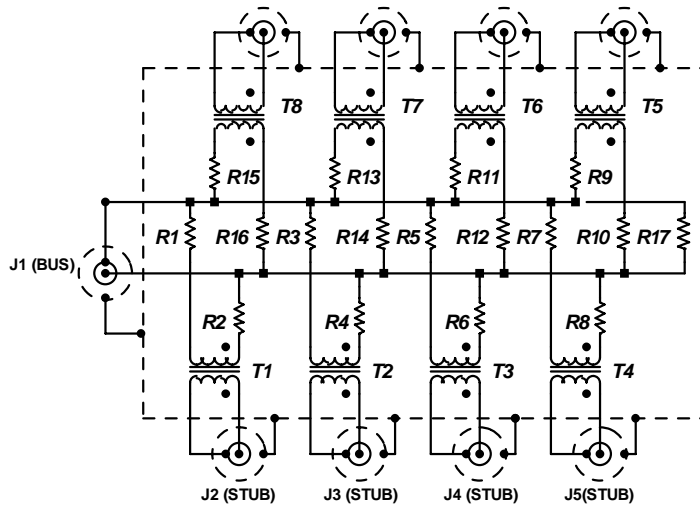


figure 13 (ESI-8211)

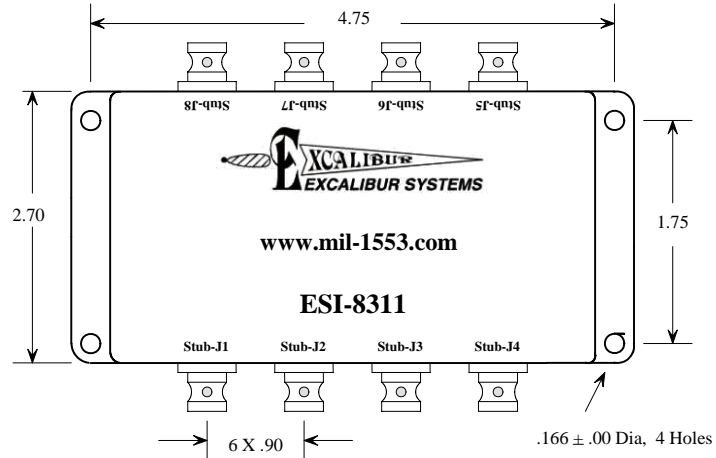


R1 - R16 = 59 Ohms, 1%, 2W
 R17 = 78 Ohms, 1%, 2W
 T1 - T8 = TURNS RATIO 1 : 1.41

SCHEMATIC DIAGRAM

EIGHT STUB ONE INTERNAL TERMINATION

SPECIFICATIONS for INTERNALLY TERMINATED COUPLERS



ALL DIMENSIONS IN INCHES

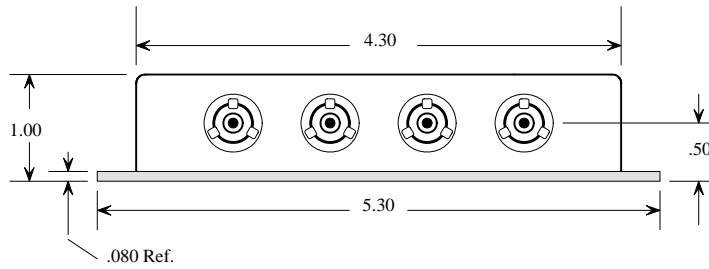
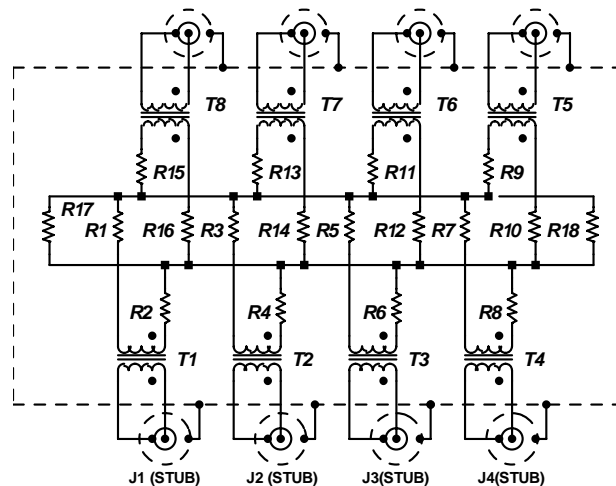


figure 14 (ESI-8311)



R1 - R16 = 59 Ohms, 1%, 2W
R17 - R18 = 78 Ohms, 1%, 2W
T1 - T8 = TURNS RATIO 1 : 1.41

SCHMATIC DIAGRAM

EIGHT STUB INTERNAL BUS

SPECIFICATIONS for INTERNALLY TERMINATED COUPLERS

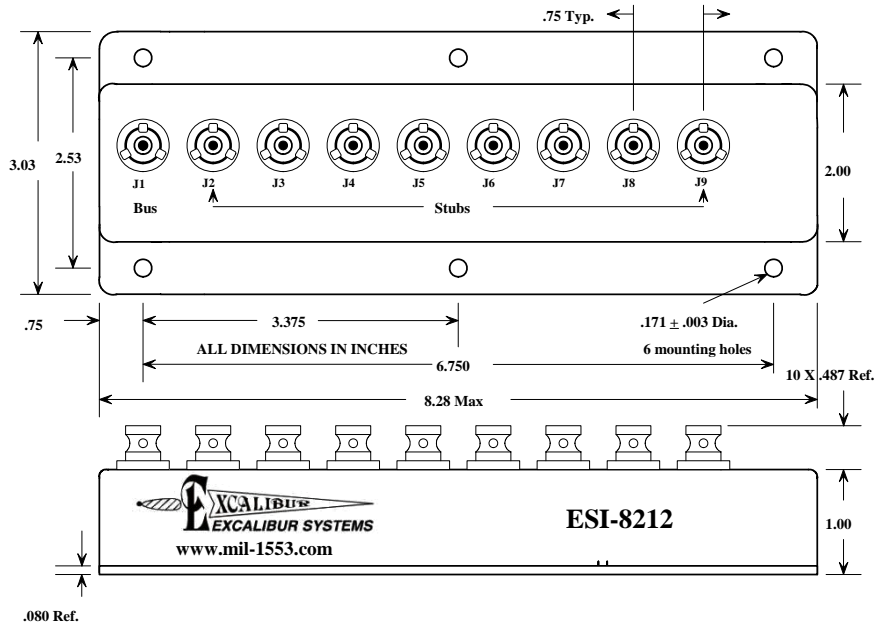
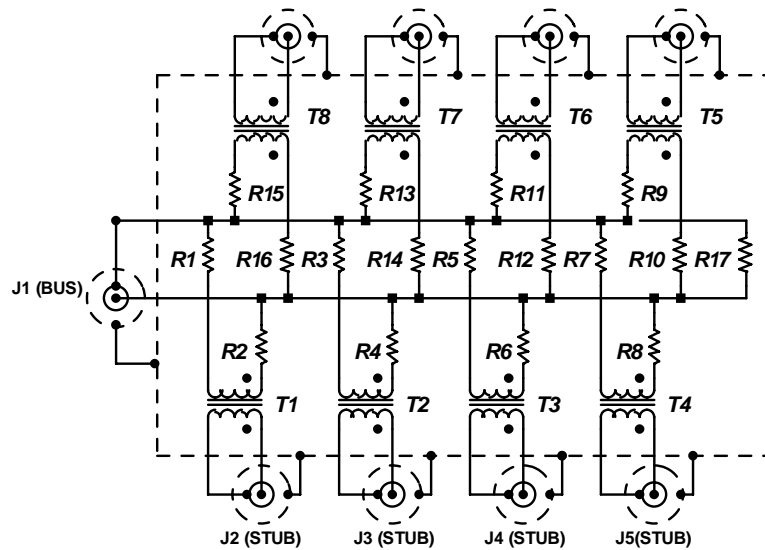


figure 15 (ESI-8212)



R1 - R16 = 59 Ohms, 1%, 2W
R17 = 78 Ohms, 1%, 2W
T1 - T8 = TURNS RATIO 1 : 1.41

SCHEMATIC DIAGRAM
EIGHT STUB INTERNAL BUS

SPECIFICATIONS for INTERNALLY TERMINATED COUPLERS

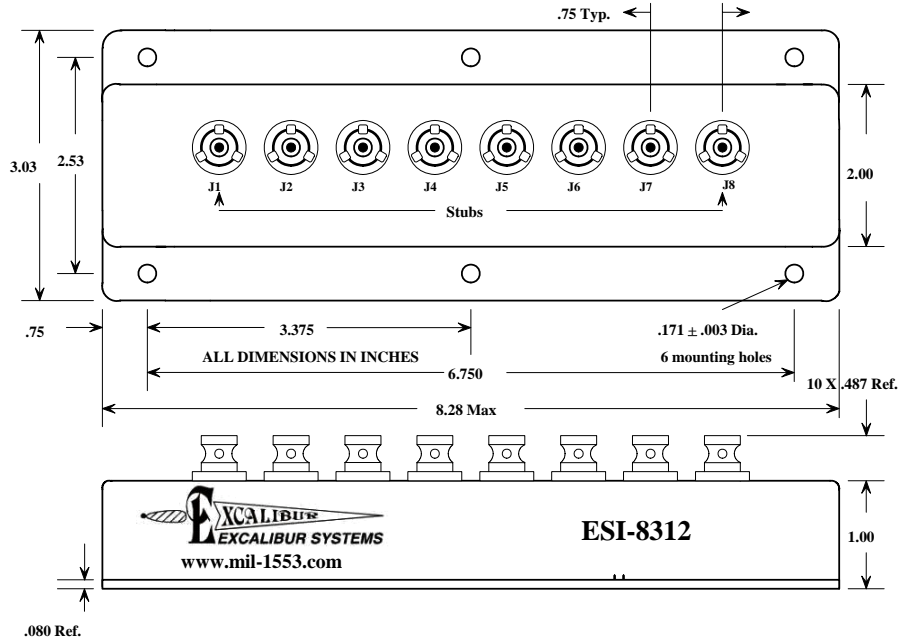
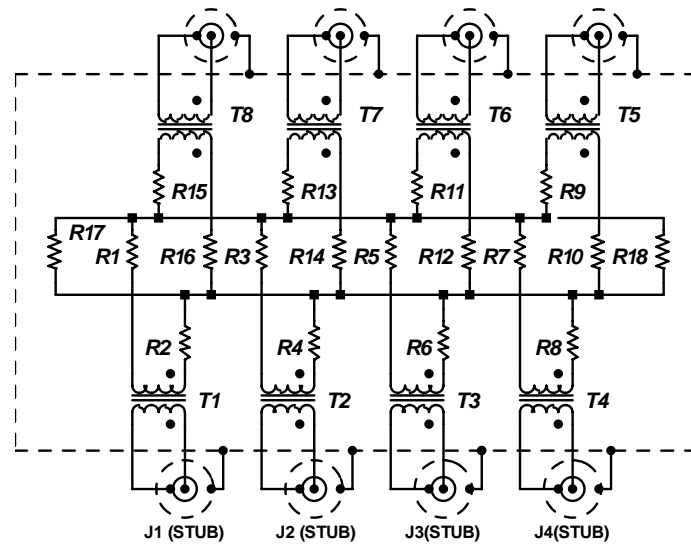


figure 16 (ESI-8312)



R1 - R16 = 59 Ohms, 1%, 2W
 R17 - R18 = 78 Ohms, 1%, 2W
 T1 - T8 = TURNS RATIO 1 : 1.41

SCHMATIC DIAGRAM

SPECIFICATIONS for INTERNALLY TERMINATED COUPLERS

1.0 REQUIREMENTS

- 1.1 DOCUMENT DESCRIBES THE REQUIREMENTS FOR INTERNALLY TERMINATED BUS COUPLERS FOR MIL-STD-1553 APPLICATIONS

2.0 MECHANICAL SPECIFICATIONS:

DESIGN AND CONSTRUCTION – THE COUPLER SHALL WITHSTAND THE STATIC HANDLING, INSTALLATION, AND OPERATIONAL SERVICE AS SPECIFIED HEREIN. THE COUPLER SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF MIL-STD-454 FOR PROCESS, PARTS AND MATERIALS, DESIGN CONSTRUCTION AND WORKMANSHIP. THE ENCLOSURE SHALL BE A METAL ENCLOSURE WITH A PROTECTIVE ENVIRONMENTAL COVERING THAT IS FLAME, ACID AND FLUID RETARDANT

3.0 ELECTRICAL SPECIFICATIONS:

- 3.1 FREQUENCY RANGE: 75 kHz – 1.0 MHz
3.2 COMMON MODE REJECTION: -45.0 dB MIN. @ 1.0MHz.
3.3 DROOP: 20% MAX. (250kHz)
3.4 OVERSHOOT & RINGING: +/- 1.0V PEAK
3.5 TRANSFORMER RATIO: 1:1.41 +/- 3%
3.6 POWER RATING: 2-WATT MIN. FOR ISOLATION RESISTORS
3.7 DIELECTRIC STRENGTH: 500 Vrms BETWEEN CABLE SHIELD AND BUS AND STUB CONDUCTORS AND BETWEEN BUS AND STUB CONDUCTORS.
3.8 INSULATION RESISTANCE: GREATER THAN 1000 MEGOHMS AT 250 VDC BETWEEN CONDUCTORS AND SHIELD.

4.0 ENVIRONMENTAL:

- 4.1 OPERATING TEMPERATURE RANGE: -55 deg. C to +125 deg. C

5.0 MARKINGS:

- 5.1 ITEMS SHALL BE LEGIBLY AND PERMANENTLY MARKED WITH THE MANUFACTURER'S NAME OR TRADEMARK, PART NUMBER, TERMINAL IDENTIFICATION AND DATE CODE.

6.0 MECHANICAL SPECIFICATIONS:

- 6.1 CONNECTORS: SEE ORDERING INFORMATION; DIFFERENTS BY PART NUMBER (TROMPETER OR EQUIV.).
MATING CONNECTOR: SEE ORDERING INFORMATION; DIFFERENTS BY PART NUMBER (TROMPETER OR EQUIV.)
6.2 MATERIAL:
6.2.1 ENCLOSURE: ALUMINUM .050 THK.
6.2.2 MOUNTING PLATE: ALUMINUM .080 THK.
6.2.3 BLUE ENAMEL (POWDER COATED)