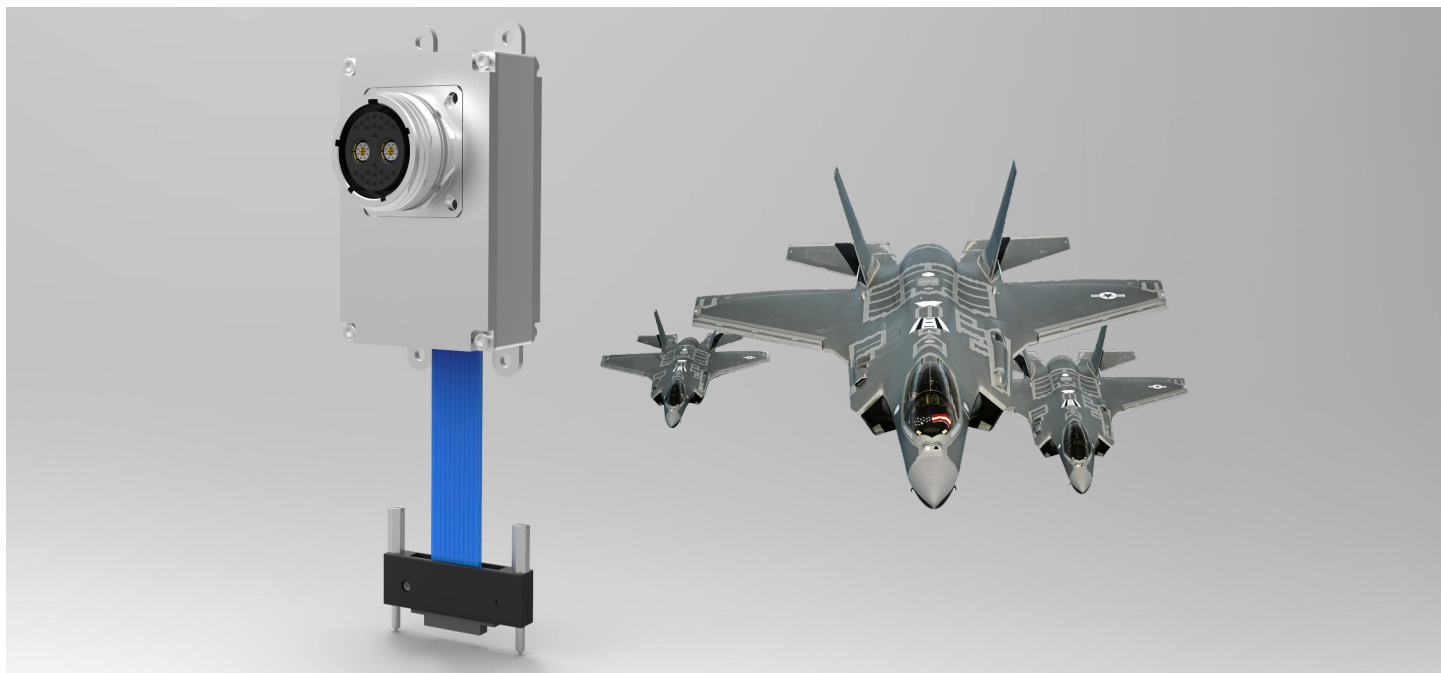


## Dual Channel 10G BASE-T to 10G BASE-KR Converter



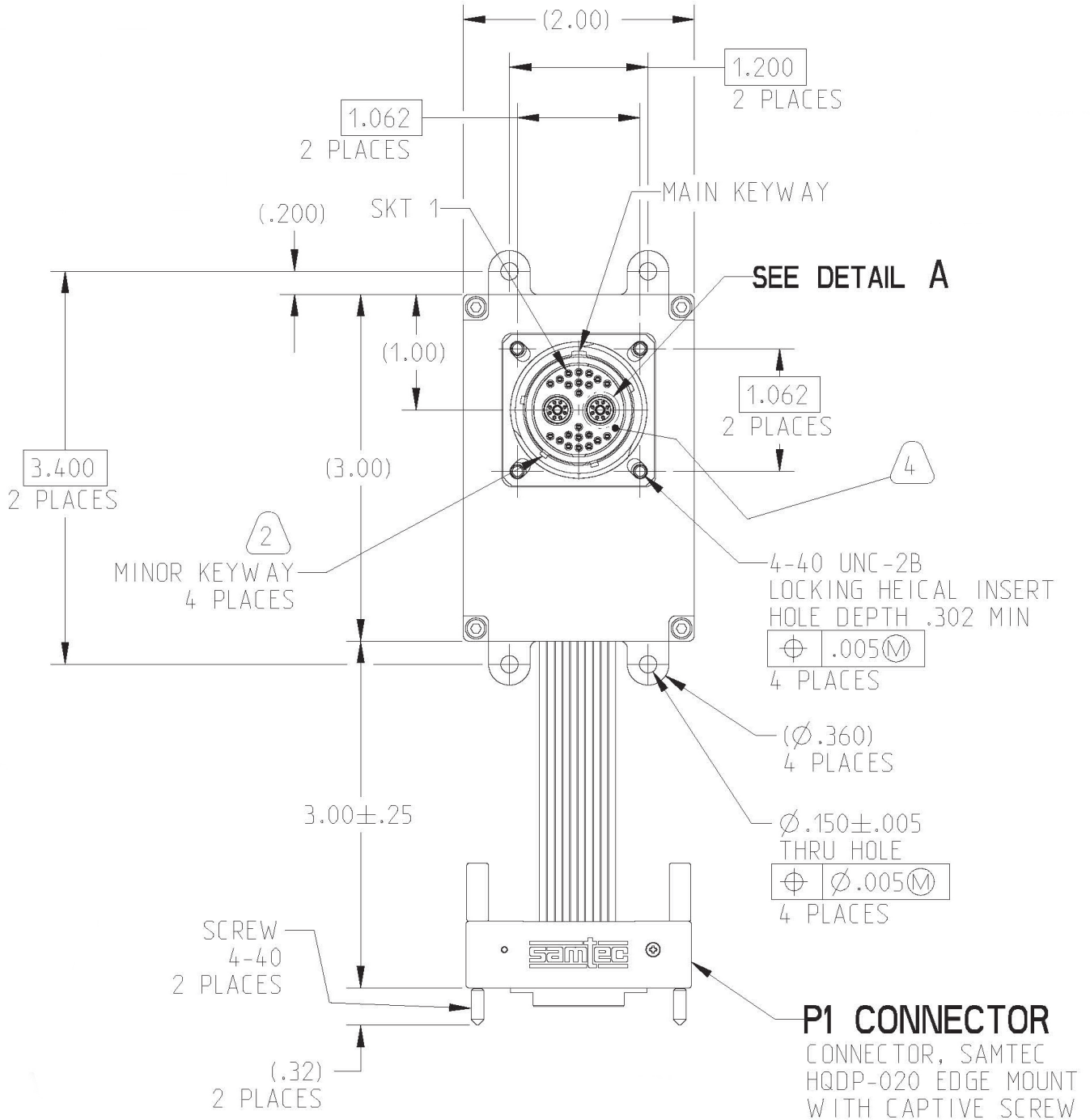
### DESCRIPTION

Amphenol's 10G BASE-T to 10G BASE-KR converter couples SerDes technology and transformer coupling, which allows for protocol conversion with a new level of ruggedization. This product takes a high speed signal in an electrical backplane and converts it to a protocol that allows for signal transmission over 100 meters between devices. This product line is rugged, flexible, affordable, and can be used in harsh environment avionics, ground systems, or naval applications.

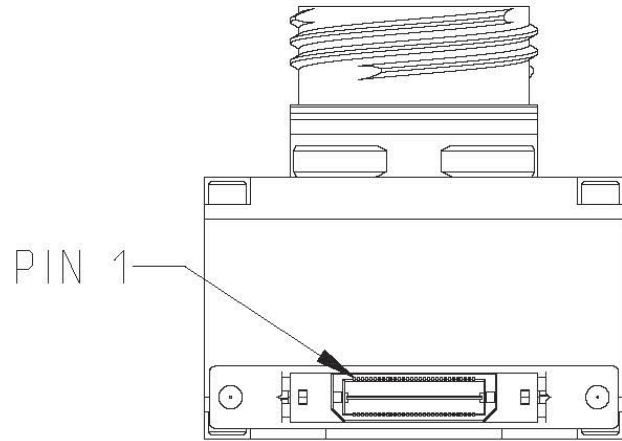
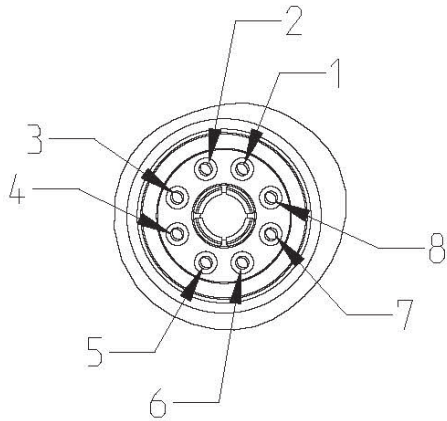
### FEATURES & BENEFITS

- (2) 10G Ethernet Channels
- Protocol conversion between 10G BASE-T and 10G BASE-KR
- Perfect for routing multiple 10 Gigabit Ethernet connections into systems and to and from circuit boards
- Compliant with IEEE 802.3an Ethernet Standards and Specifications
- Hermetic option available with a helium leak rate of 10<sup>-4</sup> cc/sec
- D38999 Shell Size 17 with standard rotations available
- 2x Octonet for 10G BASE-T
- Samtec Q Series® High Speed Cable Assembly for power + 10G BASE-KR
- 5V power connection in Samtec connector flexible ribbon cable
- Low power consumption
  - Less than 5 Watts
- Natural convection cooled (no fan or cold plate required)
- Operational temperature -40°C to +85°C
- Storage temperature -50°C to +125°C
- EMI/EMC compatible

## DIMENSIONAL INFORMATION



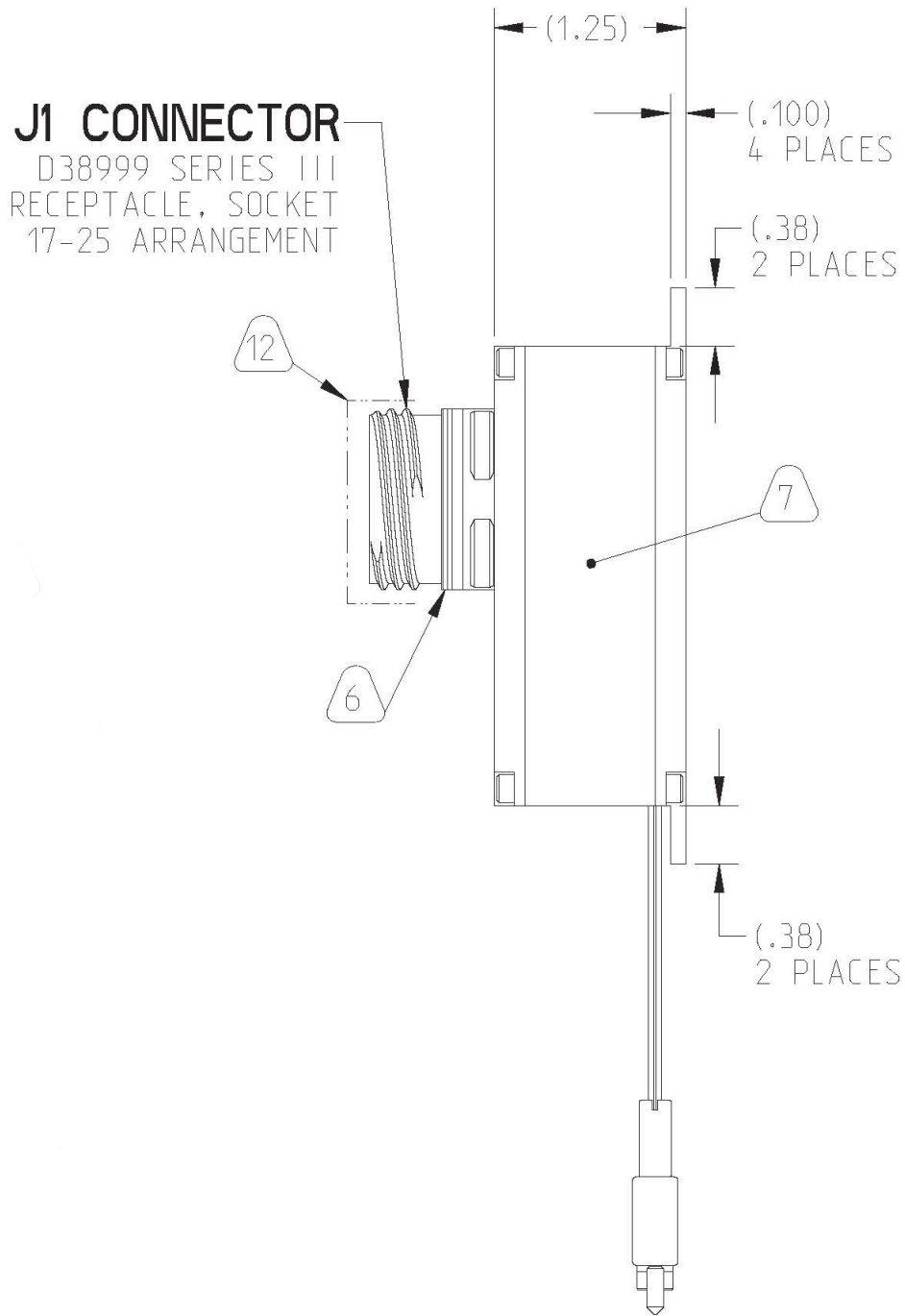
## DIMENSIONAL INFORMATION (CONT.)



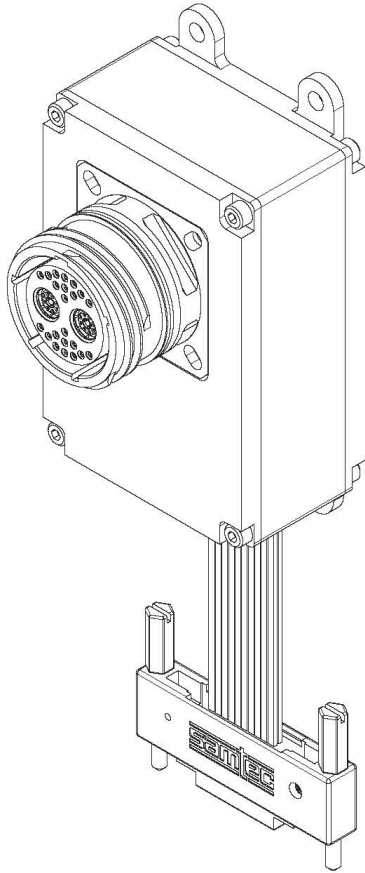
**DETAIL A**  
 OCTONET  
 SCALE 4.000  
 2 PLACES

PART NUMBER	CONNECTOR KEYWAY ROTATION
CF-02CA00-01N	N
CF-02CA00-01A	A
CF-02CA00-01B	B
CF-02CA00-01C	C
CF-02CA00-01D	D
CF-02CA00-01E	E

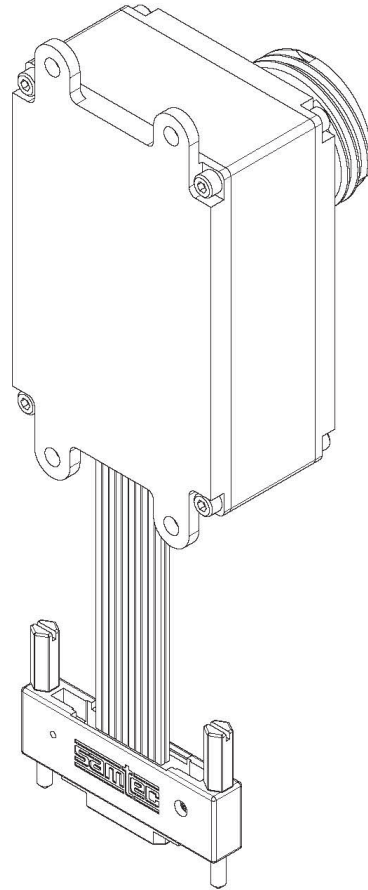
## DIMENSIONAL INFORMATION (CONT.)



**DIMENSIONAL INFORMATION (CONT.)**



**FRONT ISOMETRIC VIEW**  
SCALE 1.000



**REAR ISOMETRIC VIEW**  
SCALE 1.000

## DIMENSIONAL INFORMATION (CONT.)

<b>J1 CONNECTOR</b> <b>MIL-DTL-38999 SHELL SIZE 17-25, CONTACT SIZE 22D</b>					
SKT	DESCRIPTION	SKT	DESCRIPTION	SKT	DESCRIPTION
1	SPARE	17-1	10GBase-T_CH1_DA+	21-1	10GBase-T_CH2_DA+
2	SPARE	17-2	10GBase-T_CH1_DA-	21-2	10GBase-T_CH2_DA-
3	SPARE	17-3	10GBase-T_CH1_DB+	21-3	10GBase-T_CH2_DB+
4	SPARE	17-4	10GBase-T_CH1_DB-	21-4	10GBase-T_CH2_DB-
5	SPARE	17-5	10GBase-T_CH1_DC+	21-5	10GBase-T_CH2_DC+
6	SPARE	17-6	10GBase-T_CH1_DC-	21-6	10GBase-T_CH2_DC-
7	SPARE	17-7	10GBase-T_CH1_DD+	21-7	10GBase-T_CH2_DD+
8	SPARE	17-8	10GBase-T_CH1_DD-	21-8	10GBase-T_CH2_DD-
9	SPARE	18	SPARE	22	SPARE
10	SPARE	19	SPARE	23	SPARE
11	SPARE	20	SPARE	24	SPARE
12	SPARE				
13	SPARE				
14	SPARE				
15	SPARE				
16	SPARE				

## DIMENSIONAL INFORMATION (CONT.)

P1 CONNECTOR SAMTEC HQDP-020			
PIN	DESCRIPTION	PIN	DESCRIPTION
1	10GBase-KR_CH1_TX+	2	SPARE
3	10GBase-KR_CH1_TX-	4	SPARE
5	10GBase-KR_CH1_RX+	6	SPARE
7	10GBase-KR_CH1_RX-	8	SPARE
9	SPARE	10	SPARE
11	SPARE	12	SPARE
13	SPARE	14	SPARE
15	SPARE	16	SPARE
17	SPARE	18	SPARE
19	SPARE	20	SPARE
21	SPARE	22	SPARE
23	SPARE	24	SPARE
25	10GBase-KR_CH2_TX+	26	5V POWER
27	10GBase-KR_CH2_TX-	28	5V POWER
29	10GBase-KR_CH2_RX+	30	GROUND
31	10GBase-KR_CH2_RX-	32	GROUND
33	SPARE	34	MDC
35	SPARE	36	MD IO
37	SPARE	38	5V POWER
39	SPARE	40	GROUND
<p>SAMTEC CONNECTOR - QTH-020-01-H-D-DP-EM2</p> <p>MATING BOARD CONNECTOR - QSH-020-01-H-D-DP-K OR EQUIVALENT</p> <p>BOARD CONNECTOR MUST BE USED WITH SO-0165-04-01-02</p> <p>SCREW MOUNTS WITH CORRECT SPACING</p>			