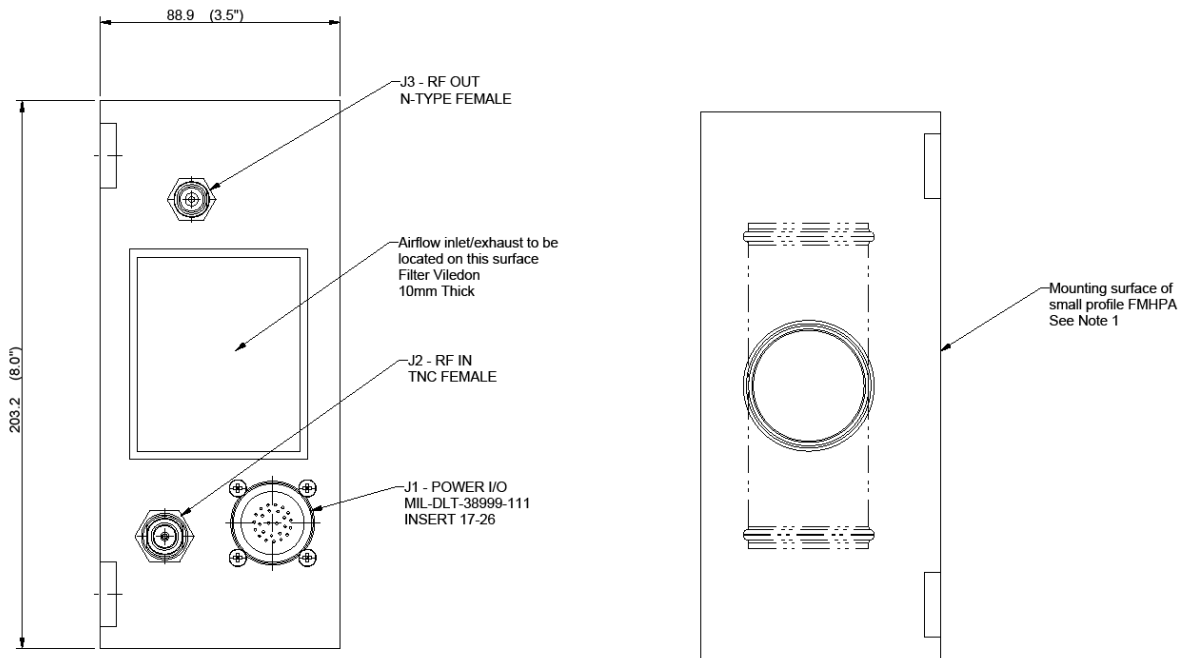
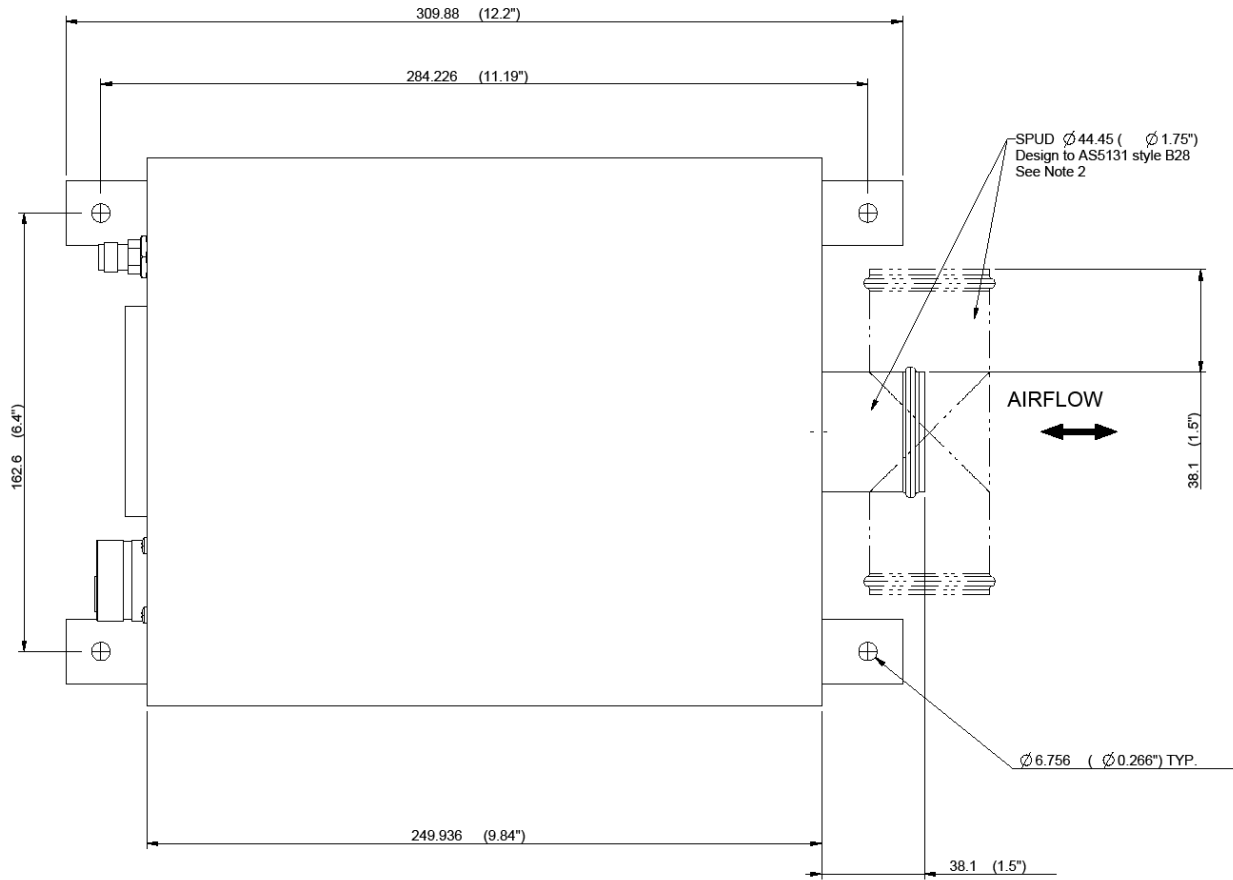


ATTACHMENT 1-7A
SMALL FLANGE MOUNT HPA FORM FACTOR

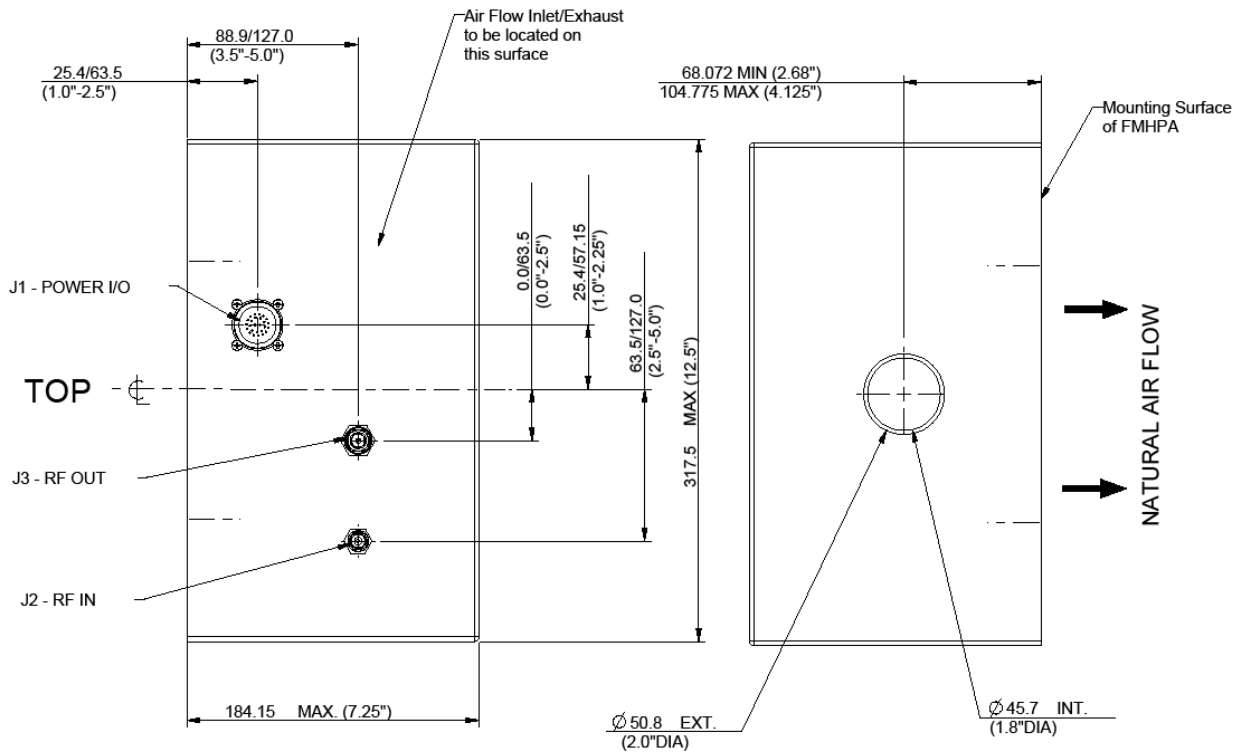
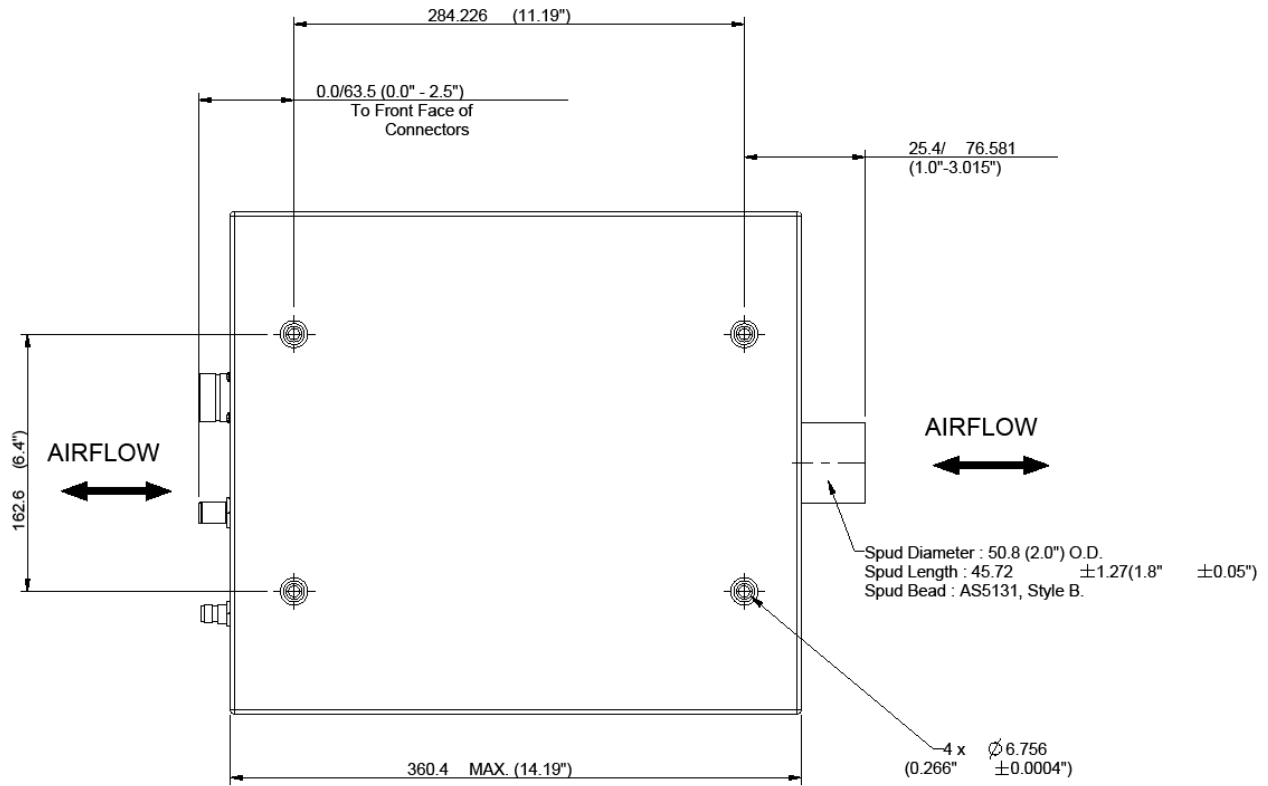


- Note 1: Small form factor FMHPA may be mounted in any orientation using the mounting surface defined.

**ATTACHMENT 1-7A
SMALL FLANGE MOUNT HPA FORM FACTOR**

- Note 2: Possible alternative cooling spud orientation to accommodate installation constraints.
- Note 3: The flange mount HPA will have 3 connectors, located as shown:
J1 - Power/Control MIL-DTL-38999 Series III Insert Arrangement 17-26
J2 - RF Input; TNC Female
J3 - RF Output; N Type Female
- Note 4: Air filter/mesh may be necessary to prevent debris interference in applications with drawn airflow.

**ATTACHMENT 1-7B
LARGE FLANGE MOUNT HPA FORM FACTOR**

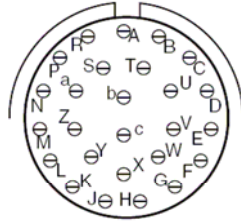


- Note 1: Large form factor FMHPA should be mounted with the identified mounting surface upwards ('TOP') to facilitate passive cooling. (See Section 2.2.2.4)

**ATTACHMENT 1-7B
LARGE FLANGE MOUNT HPA FORM FACTOR**

- Note 2: Mounting bracket locations are included as shown. Clear and unobstructed access to mounting fasteners should be provided to facilitate aircraft installation with HPA orientation as per Note 1 above.
- Note 3: A clearance of approximately 1” on top, bottom and sides of the large form factor HPA is recommended to facilitate cooling.
- Note 4: The flange mount HPA will have 3 connectors, located as shown:
J1 - Power/Control MIL-DTL-38999 Series III Insert Arrangement 17-26
J2 - RF Input; TNC Female
J3 - RF Output; N Type Female
- Note 5: Air filter/mesh may be necessary to prevent debris interference in applications with drawn airflow.

**ATTACHMENT 1-7C
FLANGE MOUNT HPA CONNECTOR LAYOUT**



17-26

MIL-DTL-38999 Series III Insert Arrangement 17-26

External Flange Mounted HPA Connector Pin Layout:

PIN No:		SIGNAL	DESCRIPTION
A	*	HPA BITE A	ARINC 429 from HPA
B	*	HPA BITE B	ARINC 429 from HPA
C		RS422 RXD A	Serial data to HPA +
D		RS422 RXD B	Serial data to HPA -
E		RS422 TXD A	Serial data from HPA +
F		RS422 TXD B	Serial data from HPA -
G		SPARE	SPARE
H		SPARE	SPARE
J	*	Chassis Ground	Chassis Ground
K		SPARE	SPARE
L		SPARE	SPARE
M		Discrete BITE #1	Discrete BITE #1 from HPA
N		Discrete BITE #2	Discrete BITE #2 from HPA
P	*	HPA Control A	ARINC 429 to HPA
R	*	HPA Control B	ARINC 429 to HPA
S	*	HPA Control Shield	Shield for ARINC 429
T	*	HPA BITE Shield	Shield for ARINC 429
U		RS422 Shield	RS422 Shield
V		SPARE	SPARE
W		SPARE	SPARE
X	*	115 Vac Hot	Aircraft ac power
Y	*	115 Vac Return	Aircraft ac power
Z		SPARE	SPARE
a		Discrete BITE #3	Discrete BITE #3 from HPA
b		ATE Pin	Manufacturer Specific
c		SPARE	SPARE

(*): Normally wired in an aircraft

Note that the pins in the connector are believed to not have sufficient current carrying capability for 28V dc.