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**PRODUCTION RELEASE**

NOTE: THIS DRAWING INCORPORATES THIRD ANGLE PROJECTION.  
INTERPRET IAW ANSI Y14.5-1982

**REVISIONS**

LTR	DESCRIPTION	DATE	APPROVED
-	RELEASED	08/13/2009	D. Saunders

**SPECIFICATIONS**

**INPUT POWER (AVG.)** IMPORTANT - UNIDIRECTIONAL DESIGN  
NOTE: ONLY APPLY THIS POWER TO DESIGNATED INPUT PORT. 100 WATTS

**INPUT MAX. PEAK POWER** 1,000 W  
-<5 μSEC. PW, <0.1% DUTY CYCLE - SMA connector theoretical max. Power is 300 W at 8 GHz - use caution with Peak Power as 1 kW is tested using Type N connectors at Factory.

POWER DERATES TO 10% @ +125°C AMBIENT FROM 25°C

HEAT SINK THERMAL RISE (CALCULATED) 0.88°C/Watt

**WEIGHT (MAX.)** (LESS, DEPENDING ON CONNECTORS TYPES) 38 OZ. (1.1 kg)

**TEMPERATURE RANGE** -55°C TO +125°C

POWER HANDLING BEST WHEN UNIT IS MOUNTED WITH HEAT SINK FINS VERTICAL  
THOUGH UNIT HANDLES FULL POWER IN ANY ORIENTATION WITH FREE AIR CONVECTION

ONLY INPUT PORT CAN TAKE FULL 100 WATTS. OUTPUT PORT 20 WATTS MAX.

**MATERIALS:**  
**CONNECTORS (COMPLY WITH MIL-PRF-39012 & MIL-STD-348):**  
HOUSING AND COUPLING NUTS ARE STAINLESS STEEL, PASSIVATED.  
CENTER CONTACTS ARE BERYLLIUM COPPER GOLD PLATING IAW MIL-PRF-39012

CASE IS EITHER COPPER ALLOY WITH SILVER OR WHITE BRONZE PLATING  
OR ALUMINUM WITH CHROMATE FINISH  
HEAT SINKS ARE ALUMINUM ALLOY, BLACK ANODIZE FINISH

INTERNAL RESISTIVE ELEMENTS ARE EITHER BERYLLIUM OXIDE OR ALUMINUM  
NITRIDE CERAMIC WITH THICK FILM AND/OR THIN FILM RESISTORS

ROHS COMPLIANT DESIGN

UNIT SUPPLIED WITH MOUNTING HOLES FOR BRACKET OR MOUNTING STANDOFFS

ATTENUATION VALUES AVAILABLE:  
3, 6, 10, 20, 30 & 40 DB.  
50 DB AND 60 DB UNITS MAY BE SLIGHTLY LONGER, UP TO 100 DB IS POSSIBLE WITH  
LONGER OUTPUT CONNECTORS

**ORDERING EXAMPLES**  
A 3 DB UNIT MALE TO FEMALE FOR 6 GHz WOULD BE 3082-7600-06-03  
A 10 DB UNIT MALE TO FEMALE FOR 2.5 GHz WOULD BE 3082-7600-02-10  
A 20 DB UNIT MALE TO MALE FOR 4 GHz WOULD BE 3081-7600-04-20

**RF ELECTRICAL SPECIFICATIONS:**

ATTENUATION	DC - 2 GHz	2 - 4 GHz	4 - 6 GHz	6 - 8 GHz
03 DB AND 06 DB	±0.50	±0.75	±0.75	±1.00
10 DB	±0.75	±0.75	±1.25	±1.50
20 DB	±0.75	±0.75	±1.25	±1.50
30 DB	±0.75	±1.00	±1.50	±1.75
40 DB	±0.75	±1.25	±1.50	±2.00
50 AND 60 DB	±1.50	±2.00	±2.50	±2.75
VSWR (MAX.)	1.20:1	1.35:1	1.40:1	1.50:1

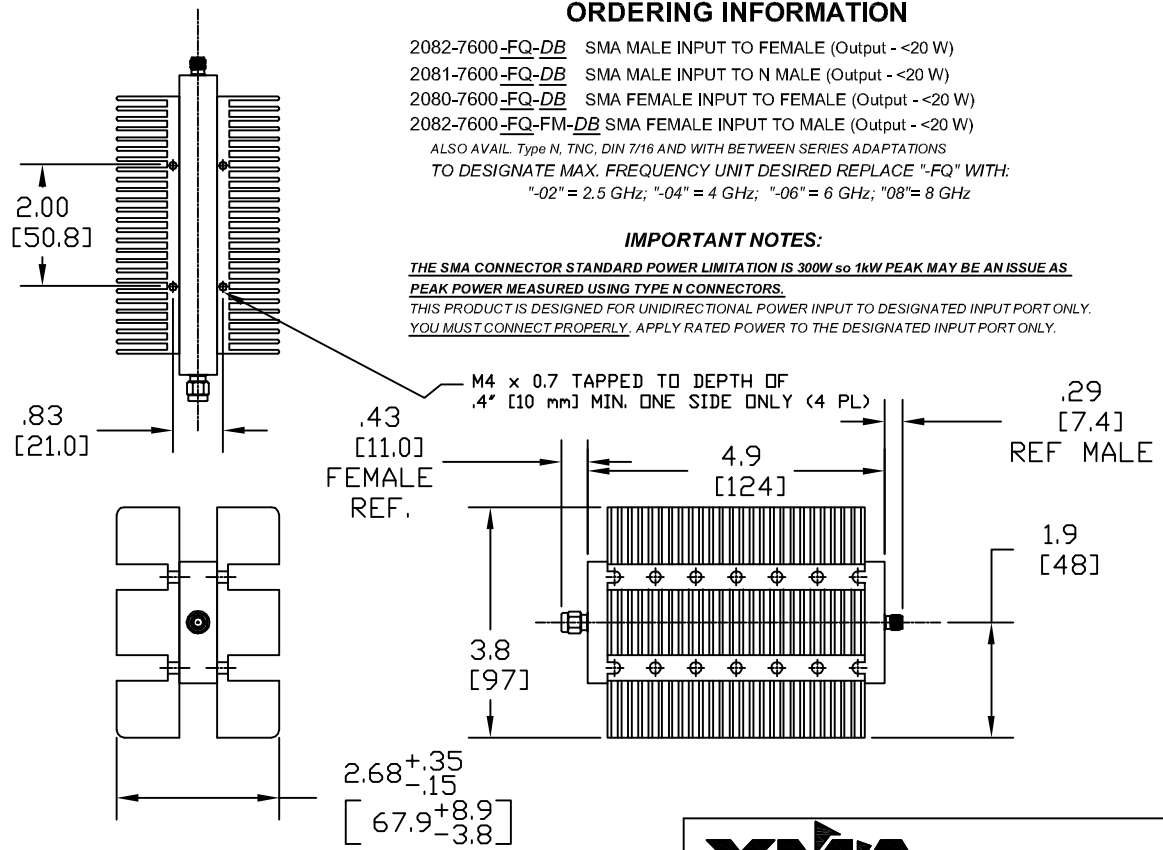
**ORDERING INFORMATION**

2082-7600-FQ-DB SMA MALE INPUT TO FEMALE (Output - <20 W)  
2081-7600-FQ-DB SMA MALE INPUT TO N MALE (Output - <20 W)  
2080-7600-FQ-DB SMA FEMALE INPUT TO FEMALE (Output - <20 W)  
2082-7600-FQ-FM-DB SMA FEMALE INPUT TO MALE (Output - <20 W)

ALSO AVAIL. Type N, TNC, DIN 7/16 AND WITH BETWEEN SERIES ADAPTATIONS  
TO DESIGNATE MAX. FREQUENCY UNIT DESIRED REPLACE "FQ" WITH:  
"-02" = 2.5 GHz; "-04" = 4 GHz; "-06" = 6 GHz; "08" = 8 GHz

**IMPORTANT NOTES:**

THE SMA CONNECTOR STANDARD POWER LIMITATION IS 300W so 1kW PEAK MAY BE AN ISSUE AS  
PEAK POWER MEASURED USING TYPE N CONNECTORS.  
THIS PRODUCT IS DESIGNED FOR UNIDIRECTIONAL POWER INPUT TO DESIGNATED INPUT PORT ONLY.  
YOU MUST CONNECT PROPERLY, APPLY RATED POWER TO THE DESIGNATED INPUT PORT ONLY.



<b>DRAWING PRACTICES PER ANSI-Y-14.5</b> MIL-STD-100 & 1000	<b>UNLESS OTHERWISE SPECIFIED</b>	<b>DRAWN</b> D. SAUNDERS	<b>DATE</b>
<b>DIMENSIONS ARE IN INCHES AND APPLY BEFORE/AFTER PROCESSING</b>	<b>TOLERANCES IN:</b>	<b>CHECKED</b>	<b>DATE</b>
<b>SURFACE FINISH</b>	DECIMALS .1" [2.5]	<b>ENGINEER APPR.</b>	<b>DATE</b>
SEE NOTES	.XX" .05" [1.27]		
<b>MATERIAL:</b>	.XXX" .03 [.77]		
SEE NOTES	ANGLES ±2°		
	UNLESS OTHERWISE NOTED DIAS ON COMMON CENTERS ARE CONCENTRIC <.003 T.I.R.		

**XMA** Powered by:  
Omni Spectra®  
Phone:603-222-2256 Fax:603-222-2259  
150 Dow Street, Manchester, NH 03101

<b>TITLE</b> 100 WATT INPUT, SMA ATTENUATOR - AIR COOLED			
<b>SIZE</b> B	<b>CAGE CODE</b> 3HT76	<b>DRAWING NUMBER</b> 2082-7600-FQ-DB	
<b>SCALE</b> 1:1	XXX	<b>SHEET 1 OF 1</b>	

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