

# BIAS TEES

7/16 - DIN, up to 7.5 GHz, 100 Volts / 2.5 Amps

## SPECIFICATIONS:

Models: 8800DMFX-yy, 8800DFFX-yy, 8800DMMX-yy, 8800DFMX-yy

**RoHS**  
Compliant



### Electrical:

|                               |                                |         |
|-------------------------------|--------------------------------|---------|
| Frequency Range               | 10 MHz - 7.5 GHz               |         |
| Standard Freq. Values         | 2.5, 4, 6 & 7.5 GHz            |         |
| Insertion Loss                | Typical                        | Maximum |
| 10 MHz - 30 MHz               | 1.00 dB                        | 1.25 dB |
| 30 MHz - 2.5 GHz              | 0.50 dB                        | 1.00 dB |
| 2.5 - 6 GHz                   | 1.25 dB                        | 1.50 dB |
| 6 - 7.5 GHz                   | 1.50 dB                        | 2.00 dB |
| VSWR                          | Typical                        | Maximum |
| 30 MHz - 2.5 GHz              | 1.40:1                         | 1.50:1  |
| 2.5 GHz - 4 GHz               | 1.30:1                         | 1.50:1  |
| 4 - 6 GHz                     | 1.40:1                         | 1.50:1  |
| 6 - 7.5 GHz                   | 1.50:1                         | 1.80:1  |
| Isolation (RF to Bias Port)   | > 30dB Typ.                    |         |
| 3dB Bandwidth                 | 5 MHz - 7.5 GHz                |         |
| Impedance                     | 50 Ohms                        |         |
| Bias-Path Resistance          | 0.04 Ohms Typ., 0.05 Ohms Max. |         |
| DC Voltage                    | 100 VDC Max.                   |         |
| DC Current                    | 2.5 Amps Max.                  |         |
| RF Power                      | 5 Watts Max                    |         |
| Current Rating vs Temperature | See Graph                      |         |

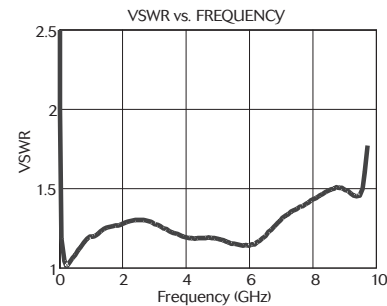
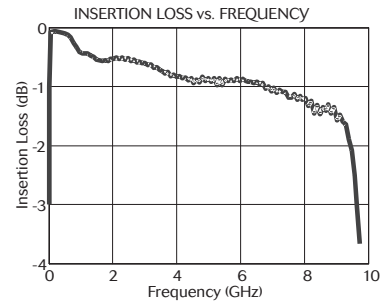
### Environmental

|                             |                 |
|-----------------------------|-----------------|
| Operating Temperature Range | -55°C to +105°C |
| Storage Temperature Range   | -60°C to +90°C  |

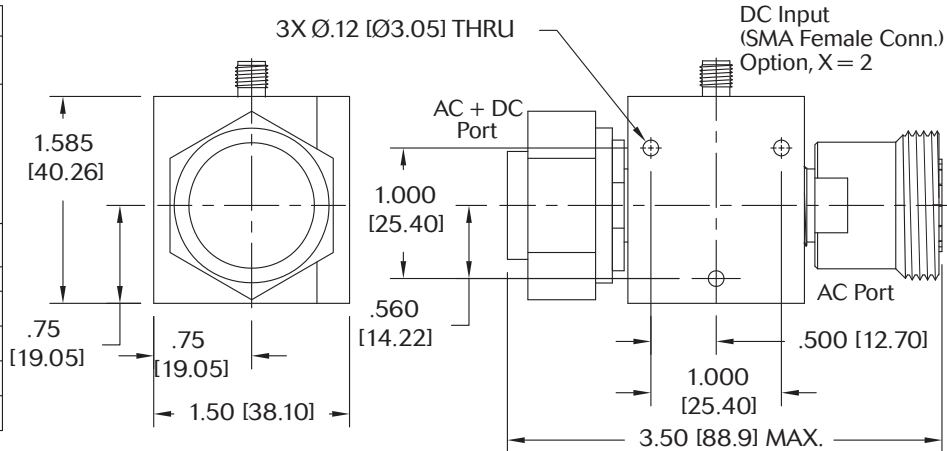
### Mechanical:

|                        |   |
|------------------------|---|
| 7/16 DIN Connectors    | Silver Plated Brass                       |
| Mates with DIN 47 223  |   |
| SMA Connectors         | Passivated Stainless Steel                |
| Mates with MIL-STD-348 |   |
| BNC Connectors         | Nickel Plated Brass                       |
| Mates with MIL-STD-348 |   |
| Conductors             | Silver or Gold Plated Beryllium Copper    |
| Body                   | Aluminum with Chemical Conversion Coating |

Typical performance from 5 MHz - 9 GHz



| DC Input Connector |                              |        |
|--------------------|------------------------------|--------|
| X=1 Solder Post    | X=3 BNC Female               |        |
|                    |                              |        |
| Model Numbers      | Connector Configuration Port |        |
|                    | AC + DC                      | AC     |
| 8820DMFX-02        | Male                         | Female |
| 8820DFFX-02        | Female                       | Female |
| 8820DMMX-02        | Male                         | Male   |
| 8820DFMX-02        | Female                       | Male   |



## HOW TO ORDER:

Model Number: **8800DZZX-yy**  
 Base Number | Freq. Range  
 DC Connector Type | 02 = 10 MHz - 2.5 GHz  
 1 = Solder Post | 04 = 10 MHz - 4 GHz  
 2 = SMA Female Conn. | 06 = 10 MHz - 6 GHz  
 3 = BNC Female Conn. | 07 = 7.5 GHz

## Ordering Examples:

Model Number: **8800DF2-02**  
 10 MHz - 2.5 GHz, DIN 7/16 Fem/Fem  
 SMA Female DC Connector Type  
 Model Number: **8800DMF1-06**  
 10 MHz - 6 GHz, DIN 7/16 Male/Fem  
 Solder Post DC Connector Type

Note: Dimensions in Brackets are Expressed in Millimeters and are for Reference Only. Design, specifications are subject to change without notice. Contact factory for technical specifications before purchasing and/or use.

8800D: REV E



Aeroflex / Inmet, Inc. • 300 Dino Drive, Ann Arbor, MI 48103 • U.S.A.  
 888-244-6638 or 734-426-5553 • FAX: 734-426-5557  
 www.aeroflex-inmet.com • inmet-sales@aeroflex.com

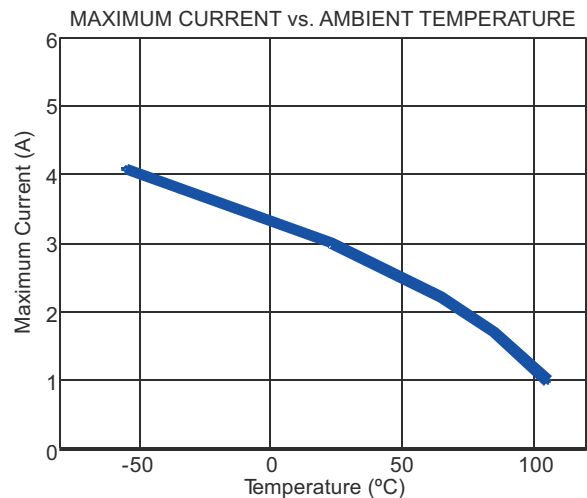
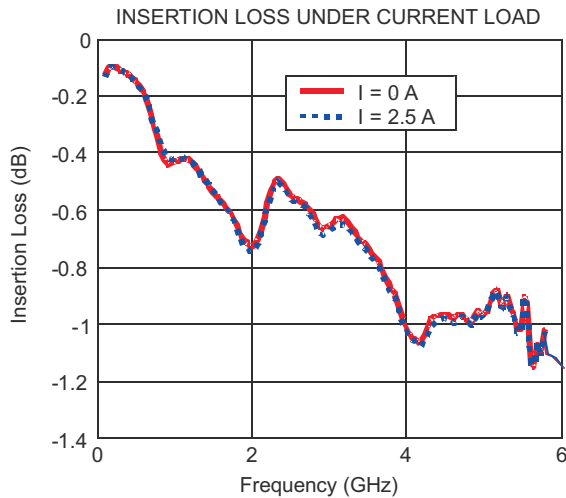
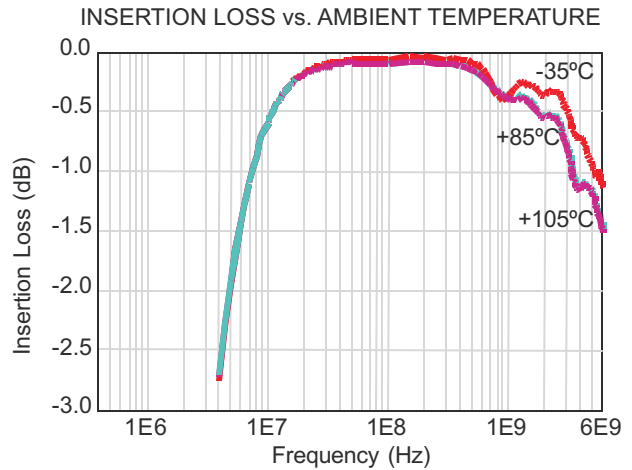
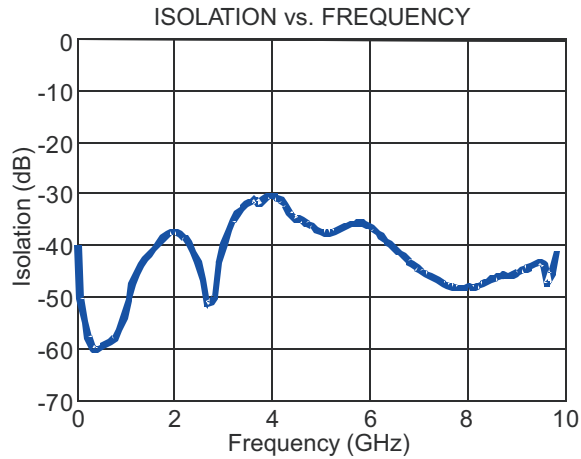
**PROPRIETARY NOTICE**

THE INFORMATION CONTAINED IN THIS DRAWING IS PROPRIETARY AND SHALL NOT BE USED OR DISCLOSED WITHOUT THE PRIOR WRITTEN PERMISSION OF AEROFLEX/INMET INC.

**REVISIONS**

| LTR | DESCRIPTION          | DATE   | DCN NO.  |
|-----|----------------------|--------|----------|
| E   | SEE REVISION HISTORY | 2/1/08 | 07-00521 |

**ADDITIONAL INFORMATION**



NOTE: DIMENSIONS IN BRACKETS ARE EXPRESSED IN MILLIMETERS AND ARE FOR REFERENCE ONLY.

|  |             |                       |                  |           |  |                   |
|--|-------------|-----------------------|------------------|-----------|--|-------------------|
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES<br>DECIMAL .XX ± .01<br>ANGULAR .XXX ± .005<br>DO NOT SCALE DRAWING |             | CONTRACT NO.          |                  |           | 300 DINO DRIVE<br>ANN ARBOR, MI 48103<br>TELEPHONE (734) 426-5553<br>FACSIMILE (734) 426-5557                |                   |
|  |             | CHECKED<br>EJM        | DATE<br>10/10/02 |           | TITLE:<br>OUTLINE DRAWING,<br>BIAS TEE, DIN 7/16 CONNECTORS<br>10 MHz - 7.5GHz, 50 OHM<br>8800DXXZ-YY SERIES |                   |
| MATERIAL:  |             | ENGINEERING<br>EA     | DATE<br>10/11/02 | SIZE<br>A | FSCM NO.<br>64671  | DWG. NO.<br>8800D |
| FINISH   |             | MANUFACTURING<br>RB   | DATE<br>10/25/02 | SCALE 3/4 |  | RELEASE DATE      |
| SIMILAR TO   | WEIGHT (gr) | QUAL ASSURANCE<br>RFF | DATE<br>10/11/02 | SHEET 2   |  | OF 2              |
|  |             | MARKETING<br>NH       | DATE<br>10/24/02 |           |  |                   |