

# BIAS TEES TYPE N

UP TO 6.0 GHz  
100 VOLTS / 7 AMPS



MODELS: 8820NMFY-0Y, 8820NFFX-0Y, 8820NMMX-0Y, 8820NFMX-0Y

## SPECIFICATIONS:

### Electrical:

Frequency Range  
 8820NXXY-02 \_\_\_\_\_ 500 MHz – 2.5 GHz  
 8820NXXY-06 \_\_\_\_\_ 1 – 6 GHz  
 Insertion Loss:  
 8820NXXY-02 \_\_\_\_\_ 0.50 dB Max.  
 8820NXXY-06 \_\_\_\_\_ 1.00 dB Max.  
 VSWR:  
 8820NXXY-02 \_\_\_\_\_ 1.40:1 Max.  
 8820NXXY-06 \_\_\_\_\_ 1.50:1 Max.  
 Isolation (RF to Bias Port) \_\_\_\_\_ > 20dB Typ.  
 Impedance \_\_\_\_\_ 50 Ohms  
 Bias-Path Resistance \_\_\_\_\_ 0.008 Ohms Typ., 0.010 Ohms Max.  
 DC Voltage \_\_\_\_\_ 100 VDC Max.  
 DC Current \_\_\_\_\_ 7 Amps Max.  
 RF Power \_\_\_\_\_ 50 Watts Max.  
 Current Rating vs Temperature \_\_\_\_\_ See Graph

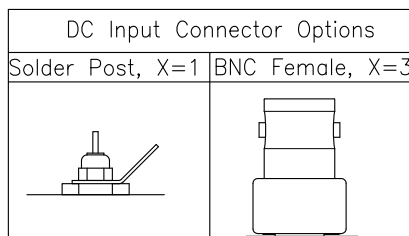
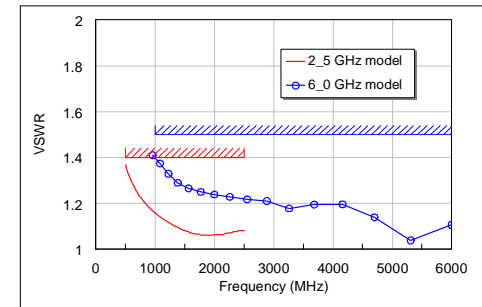
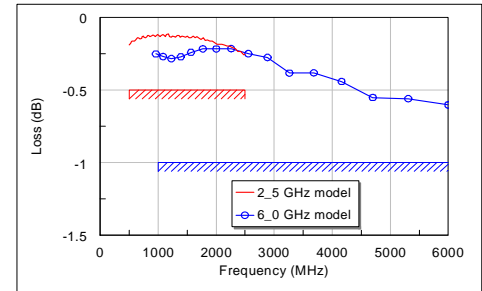
### Environmental:

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

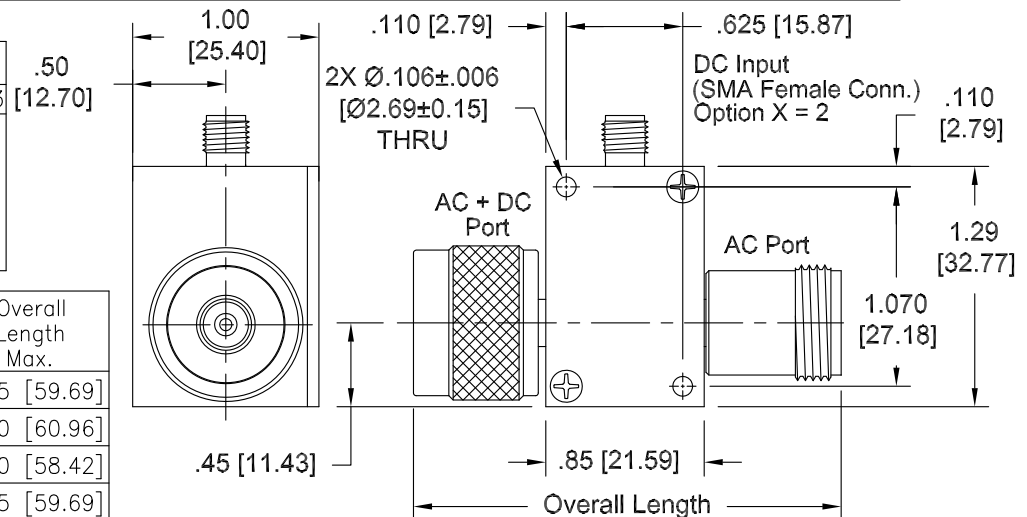
### Mechanical:

Type N & SMA Connectors \_\_\_\_\_ Passivated Stainless Steel  
 Mates with MIL-STD-348  
 BNC Connectors \_\_\_\_\_ Nickel Plated Brass  
 Mates with MIL-STD-348  
 Conductors \_\_\_\_\_ Gold Plated Beryllium Copper  
 Body \_\_\_\_\_ Aluminum with  
 \_\_\_\_\_ Chemical Conversion Coating

Typical performance of  
2.5 and 6.0 GHz units.



Model Numbers	Connector Configuration Port		Overall Length Max.
	AC + DC	AC	
8820NMFY-YY	Male	Female	2.35 [59.69]
8820NFFX-YY	Female	Female	2.40 [60.96]
8820NMMX-YY	Male	Male	2.30 [58.42]
8820NFMX-YY	Female	Male	2.35 [59.69]



## HOW TO ORDER:

Model Number: **8820NXXY-ZZ**

Base Number \_\_\_\_\_

DC Connector Type \_\_\_\_\_

- 1 = Solder Post
- 2 = SMA Female Conn.
- 3 = BNC Female Conn.

Frequency Range

- 02 = 500 MHz to 2.5 GHz
- 06 = 1 to 6 GHz

## Ordering Examples:

Model Number: **8820NFF2-02**

500 MHz – 2.5 GHz, Type N Fem/Fem  
SMA Female DC Connector Type

Model Number: **8820NMF1-06**

1 – 6 GHz, Type N 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 or use.

8820N; REV F

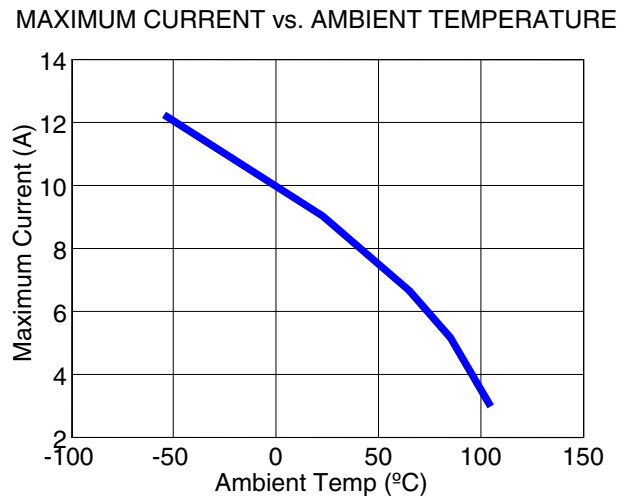
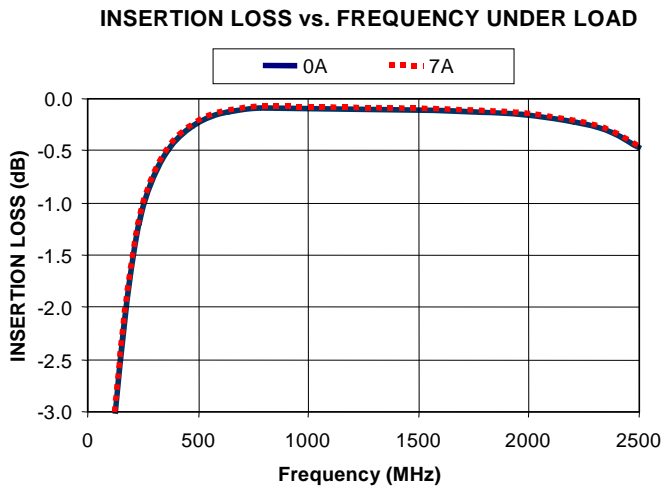
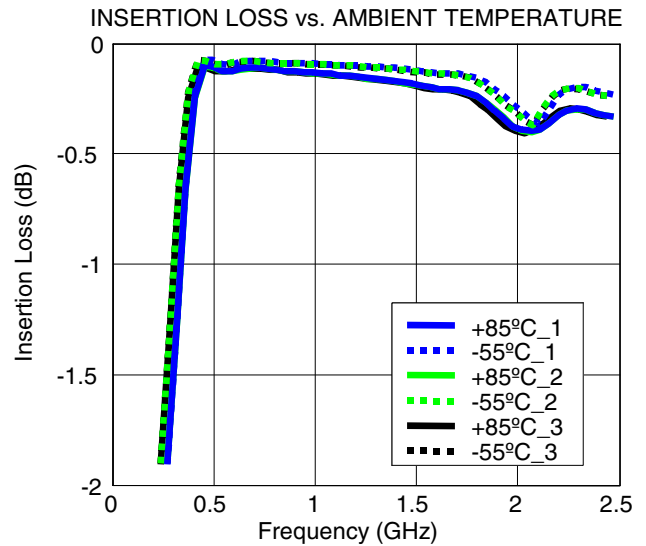
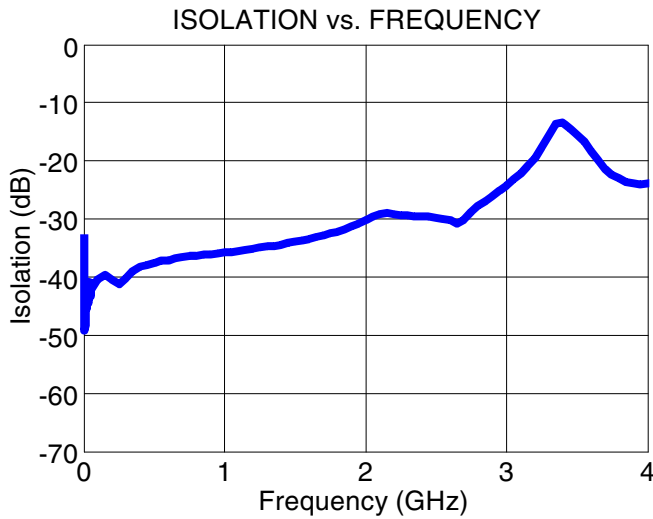
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**REVISIONS**

LTR	DESCRIPTION	DATE	DCN NO.
F	SEE REVISION HISTORY	4/21/10	10-00086

Typical performance of 2.5 GHz Model



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

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMAL .XX ± .01 ANGULAR ± .XXX ± .005 DO NOT SCALE DRAWING		CONTRACT NO.			300 DINO DRIVE ANN ARBOR, MI 48103 TELEPHONE (734) 426-5553 FACSIMILE (734) 426-5557	
		CHECKED EJM	DATE 10/10/02		TITLE: OUTLINE DRAWING, BIAS TEE, TYPE N CONNECTORS 2.5 & 6.0 GHz, 100 V., 7A 8820NXXZ-YY SERIES	
MATERIAL:		ENGINEERING EA	10/11/02	SIZE A		
		FINISH	MANUFACTURING RB	10/25/02	SCALE FULL	RELEASE DATE
SIMILAR TO	WEIGHT (gr)	QUAL. ASSURANCE RFF	10/11/02			
		MARKETING NH	10/24/02			