BIAS TEES

SMA, 500 MHz - 2.5 GHz, 100 Volts / 7 AMPS

RoHS Compliant

SPECIFICATIONS:

Models: 8820SMFX-02, 8820SFFX-02, 8820SMMX-02, 8820SFMX-02

Electrical:

Frequency Range		500 MHz - 2.5 GHz
Insertion Loss	Typical	Maximum
500 MHz - 2.5 GHz	0.25 dB	0.50 dB
VSWR	Typical	Maximum
500 MHz - 2.5 GHz	1.25:1	1.40:1
Isolation (RF to Bias Port)		> 20dB Typ.
3dB Bandwidth		100 MHz - 3.7 GHz
Impedance		50 Ohms
Bias-Path Resistance		0.008 Ohms Typ., 0.01 Ohms Max.
DC Voltage		100 VDC Max.
DC Current		7 Amps Max.
RF Power		50 Watts Max.
Current Rating vs Temperature		See Graph

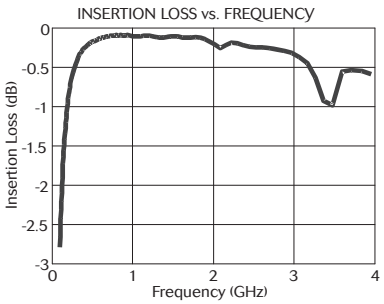
Environmental

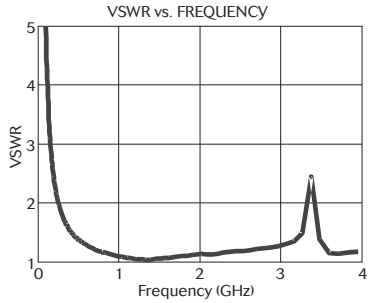
Operating Temperature Range	-55°C to +105°C
Storage Temperature Range	-60°C to +90°C

Mechanical:

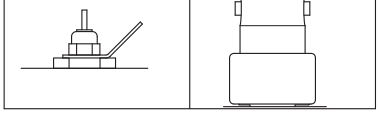
SMA Connectors (Mates with MIL-STD-348)	Passivated Stainless Steel
BNC Connectors (Mates with MIL-STD-348)	Nickel Plated Brass
Conductors	Gold Plated Beryllium Copper
Body	Aluminum with Chemical Conversion Coating

Typical performance from 100 MHZ - 3.7 GHz

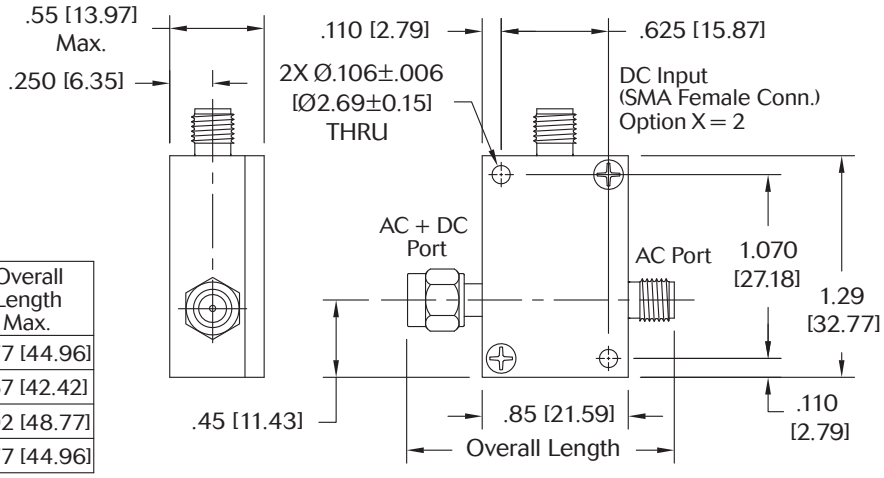




DC Input Connector Options	
Solder Post, X=1	BNC Female, X=3



Model Numbers	Connector Configuration Port		Overall Length Max.
	AC + DC	AC	
8820SMFX-yy	Male	Female	1.77 [44.96]
8820SFFX-yy	Female	Female	1.67 [42.42]
8820SMMX-yy	Male	Male	1.92 [48.77]
8820SFMX-yy	Female	Male	1.77 [44.96]



HOW TO ORDER:

Model Number: 8820SZZX-02

Base Number

DC Connector Type

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

Ordering Examples:

Model Number: 8820SFF2-02
500 MHz - 2.5 GHz, SMA Fem/Fem
SMA Female DC Connector Type

Model Number: 8820SMF1-02
500 MHz - 2.5 GHz, SMA 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.

8820S: REV F

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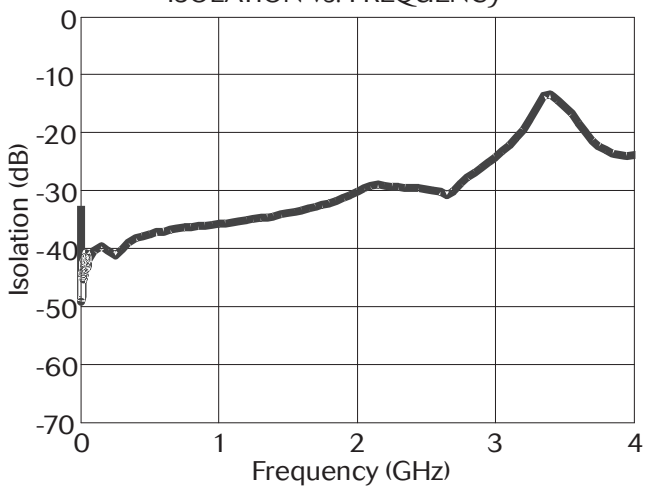
REVISIONS

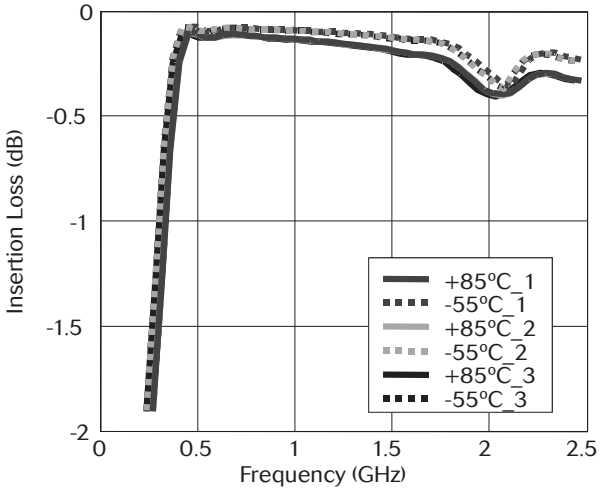
LTR	DESCRIPTION	DATE	DCN NO.
F	SEE REVISION HISTORY	8/7/07	07-00322

ADDITIONAL INFORMATION

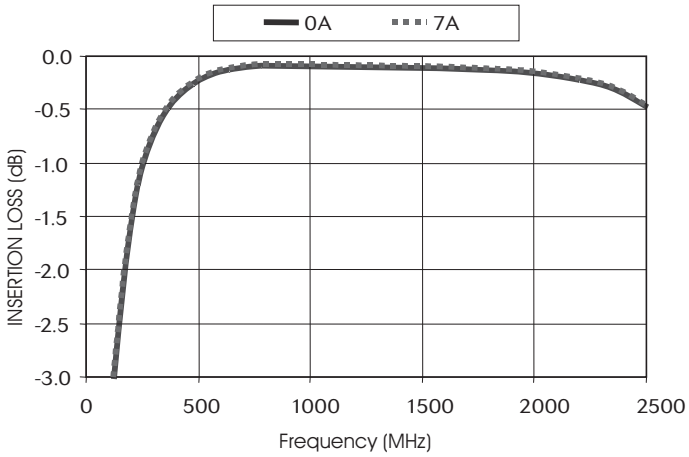
ISOLATION vs. FREQUENCY



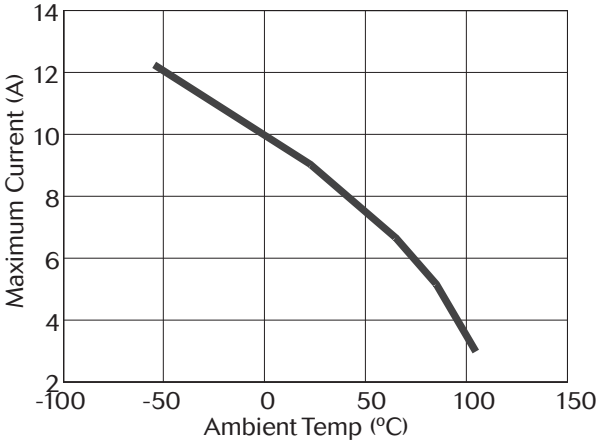
INSERTION LOSS vs. AMBIENT TEMPERATURE



INSERTION LOSS vs. FREQUENCY UNDER LOAD



MAXIMUM CURRENT vs. AMBIENT TEMPERATURE



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

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMAL .XX ± .01 .XXX ± .005 ANGULAR ± DO NOT SCALE DRAWING	CONTRACT NO.	AEROFLEX INMET	300 DINO DRIVE ANN ARBOR, MI 48103 TELEPHONE (734) 426-5553 FACSIMILE (734) 426-5557
MATERIAL:	CHECKED ACB 8/12/02	TITLE:	OUTLINE DRAWING, BIAS TEE, SMA CONNECTORS 500 MHz – 2.5 GHz, 50 OHM 8820SXXZ-YY SERIES
FINISH	ENGINEERING EA 8/12/02	SIZE A	FSCM NO. 64671
SIMILAR TO / WEIGHT (gr)	MANUFACTURING RB 9/6/02		DWG. NO. 8820S
	QUAL. ASSURANCE RFF 9/3/02	SCALE FULL	RELEASE DATE
	MARKETING RG 9/6/02		SHEET 2 OF 2