BIAS TEES
SMA

UP TO 12 GHz
100 VOLTS / 2.5 AMPS

api technologies corp. > INMET

MODELS: 8800SMFX–YY, 8800SFFX–YY, 8800SMMX–YY, 8800SFMX–YY

SPECIFICATIONS:

Typical performance from 5 MHz – 9 GHz

Electrical:

Frequency Range	10 MHz – 12 GHz
Standard Freq. Values	2.5, 4, 6, 9 & 12 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	1.00 dB	1.25 dB
6 – 9 GHz	1.50 dB	2.00 dB
9 – 12 GHz	2.00 dB	3.00 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 – 9 GHz	1.50:1	1.80:1
9 – 12 GHz	1.75:1	2.00:1

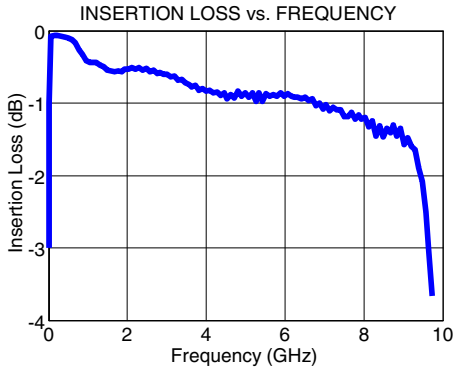
Isolation (RF to Bias Port)	> 30dB Typ.
3dB Bandwidth	5 MHz – 15 GHz
Impedance	50 Ohms
Bias–Path Resistance	0.04 Ohms Typ., 0.05 Ohms Max.
DC Voltage	100 VDC Max.
DC Current	2.5 Amps Max.
RF Power	5 Watts Max
Current Rating vs Temperature	See Graph

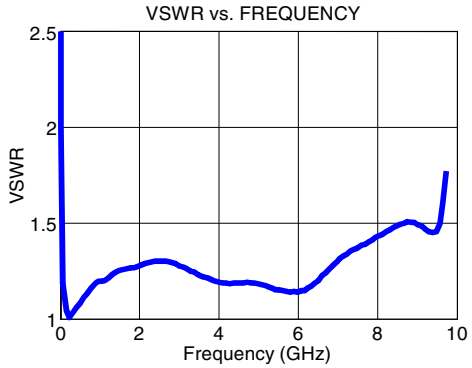
Environmental:

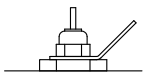
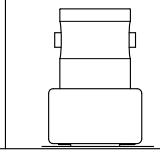
Operating Temperature Range	–55°C to +105°C
Storage Temperature Range	–60°C to +90°C

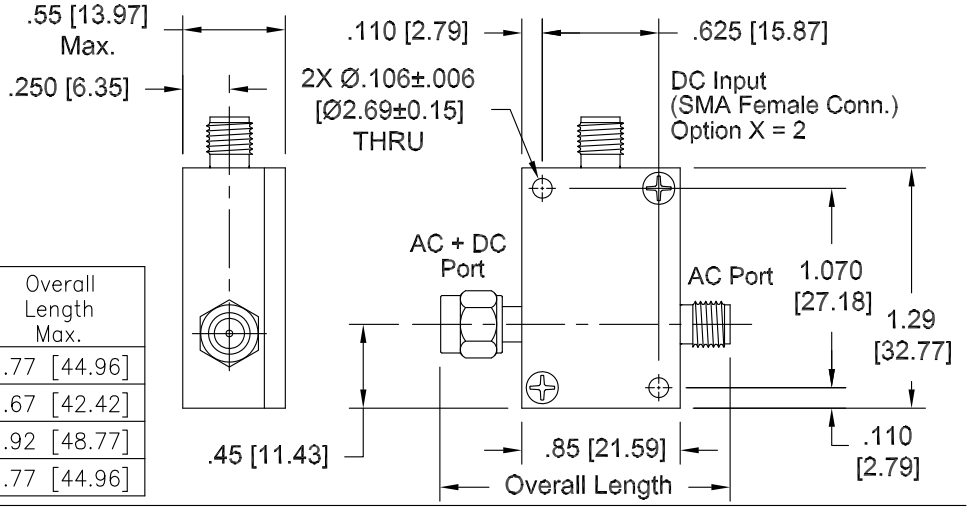
Mechanical:

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





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



Model Numbers	Connector Configuration Port		Overall Length Max.
	AC + DC	AC	
8800SMFX–YY	Male	Female	1.77 [44.96]
8800SFFX–YY	Female	Female	1.67 [42.42]
8800SMMX–YY	Male	Male	1.92 [48.77]
8800SFMX–YY	Female	Male	1.77 [44.96]

HOW TO ORDER:

Model Number: 8800SZZX-YY

Base Number

DC Connector Type

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

Freq. Range

02 = 10 MHz – 2.5 GHz
04 = 10 MHz – 4 GHz
06 = 10 MHz – 6 GHz
09 = 10 MHz – 9 GHz
12 = 10 MHz – 12 GHz

Ordering Examples:

Model Number: 8800SFF2-02
10 MHz – 2.5 GHz, SMA Fem/Fem
SMA Female 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.

300 Dino Drive • Ann Arbor, MI 48103–9457 U.S.A. • 888–244–6638 or 734–426–5553 • FAX 734–426–5557 • inmet.apitech.com

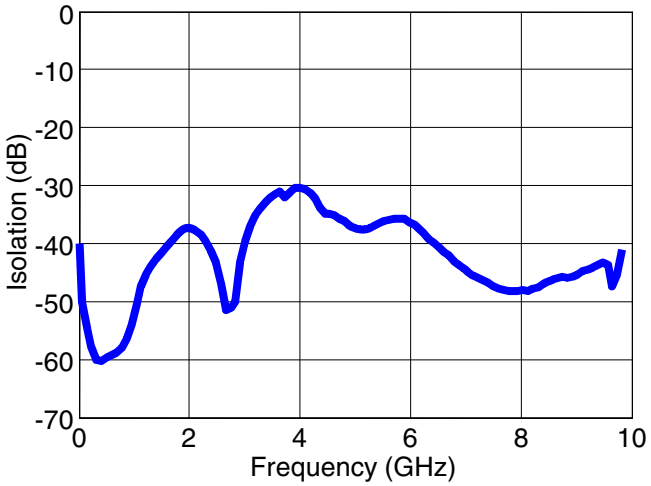
REVISIONS

LTR	DESCRIPTION	DATE	DCN NO.
F	SEE REVISION HISTORY	2/27/07	06-00708

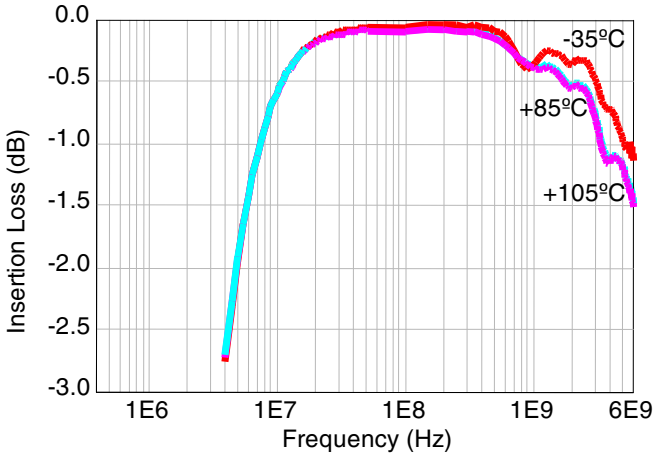
ADDITIONAL INFORMATION

Typical performance from 5 MHz – 9 GHz

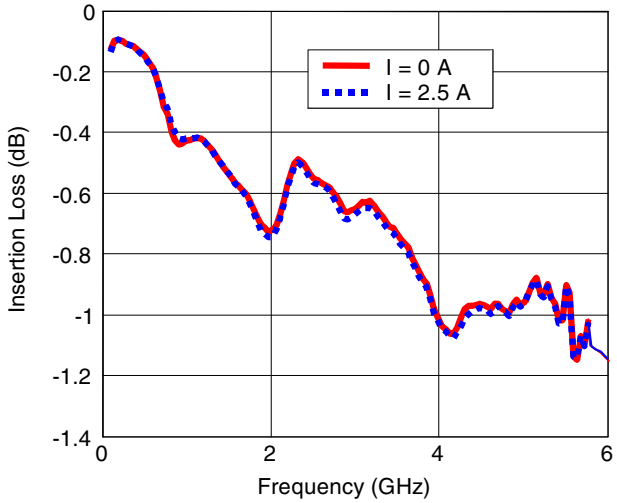
ISOLATION vs. FREQUENCY



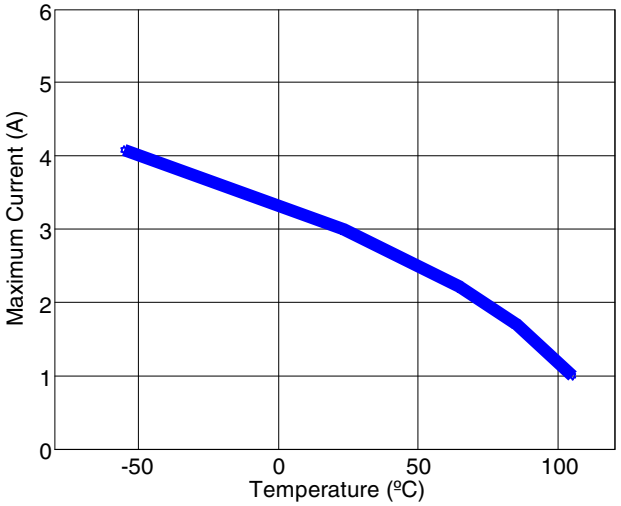
INSERTION LOSS vs. AMBIENT TEMPERATURE



INSERTION LOSS UNDER CURRENT 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.		api technologies corp. > INMET 300 DINO DRIVE ANN ARBOR, MI 48103 TELEPHONE (734) 426-5553 FACSIMILE (734) 426-5557
MATERIAL:	CHECKED ACB	DATE 8/12/02	TITLE: OUTLINE DRAWING, BIAS TEE, SMA CONNECTORS 10 MHz – 12 GHz, 50 OHM 8800SXXZ-YY SERIES
FINISH	ENGINEERING EA	8/12/02	
	MANUFACTURING RB	9/6/02	SIZE A / FSCM NO. 64671 / DWG. NO. 8800S
SIMILAR TO / WEIGHT (gr)	QUAL. ASSURANCE RFF	9/3/02	
	MARKETING RG	9/6/02	SCALE FULL / RELEASE DATE / SHEET 2 OF 2