

BIAS TEES

SMA, up to 6 GHz, 100 Volts / 7 AMPS

RoHS
Compliant

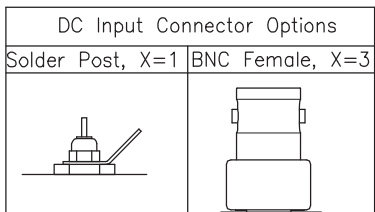
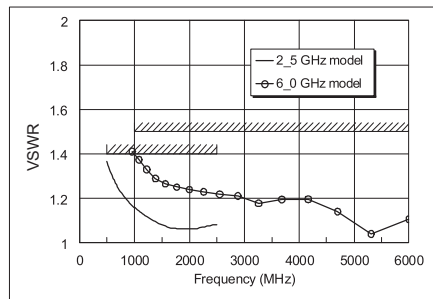
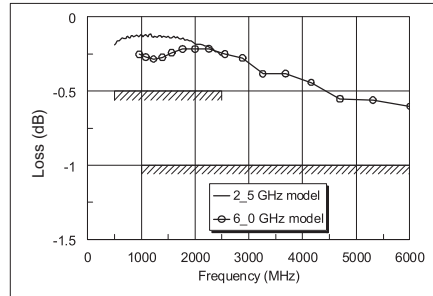
SPECIFICATIONS:

Models: 8820SMFX-0Y, 8820SFFX-0Y, 8820SMMX-0Y, 8820SFMX-0Y

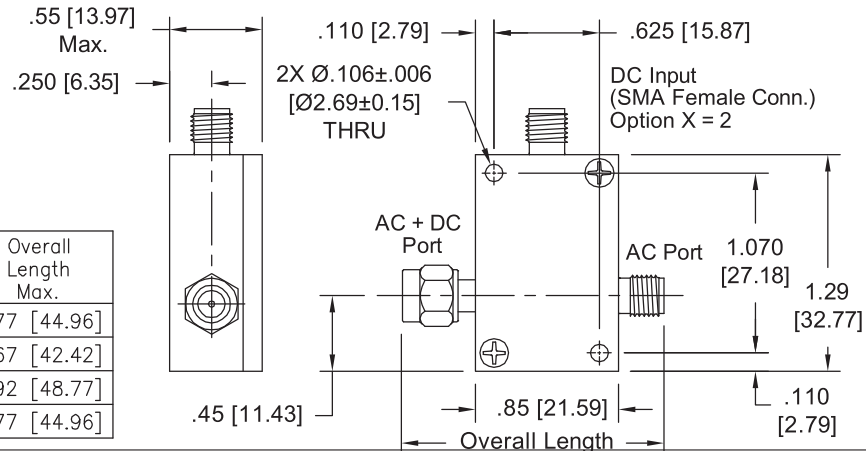
| | |
|-------------------------------|---|
| Electrical: | |
| Frequency Range | |
| 8820SXXY-02 | 500 MHz – 2.5 GHz |
| 8820SXXY-06 | 1 – 6 GHz |
| Insertion Loss: | |
| 8820SXXY-02 | 0.50 dB Max. |
| 8820SXXY-06 | 1.00 dB Max. |
| VSWR: | |
| 8820SXXY-02 | 1.40:1 Max. |
| 8820SXXY-06 | 1.50:1 Max. |
| 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: | |
| 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 | |
| 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: **8820SXXY-ZZ**

Base Number | Frequency Range

DC Connector Type |

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

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: **8820SMF1-06**
1 – 6 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 G



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PROPRIETARY NOTICE

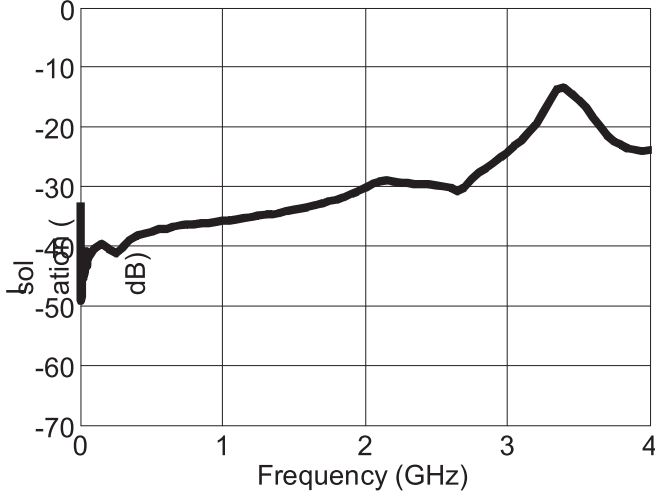
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REVISIONS

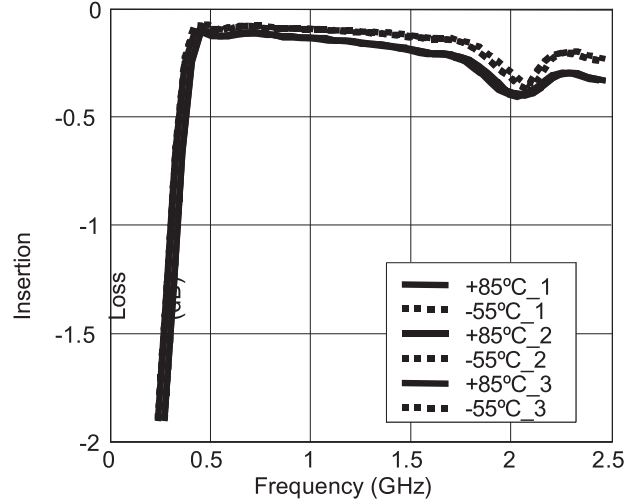
| LTR | DESCRIPTION | DATE | DCN NO. |
|-----|----------------------|---------|----------|
| G | SEE REVISION HISTORY | 4/21/10 | 10-00086 |

Typical performance of 2.5 GHz unit.

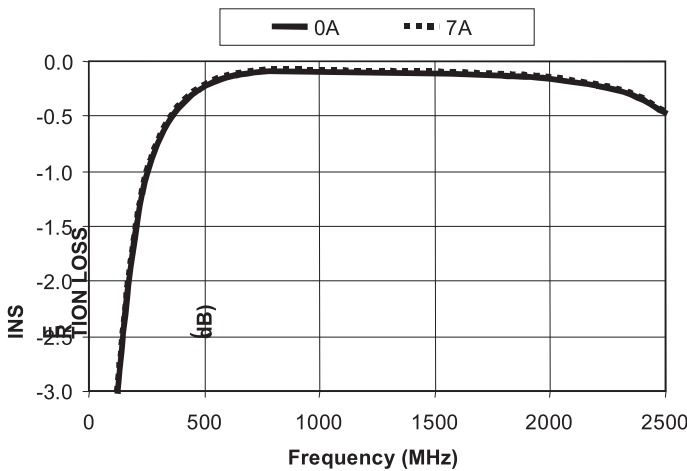
ISOLATION vs. FREQUENCY



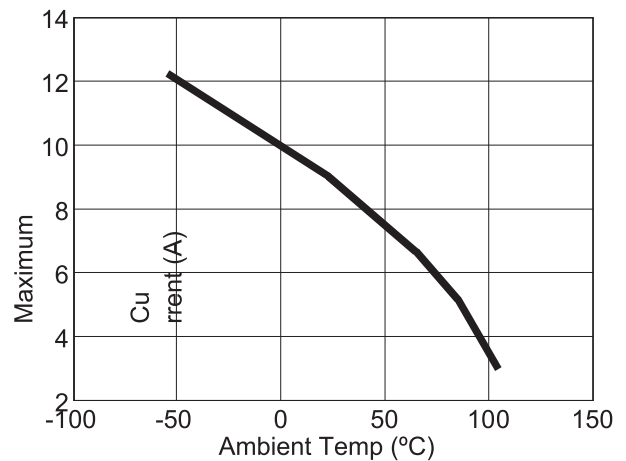
INSERTION LOSS vs. AMBIENT TEMPERATURE




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 ANGULAR .XX ± .01 ± .XXX ± .005 DO NOT SCALE DRAWING | | CONTRACT NO. | |  | 300 DINO DRIVE ANN ARBOR, MI 48103 TELEPHONE (734) 426-5553 FACSIMILE (734) 426-5557 | | |
| | | CHECKED | DATE | | TITLE: OUTLINE DRAWING, BIAS TEE, SMA CONNECTORS 2.5 & 6.0 GHz, 100 V., 7A 8820SXXZ-YY SERIES | | |
| ACB | 8/12/02 | ENGINEERING | EA | 8/12/02 | | | |
| MATERIAL: | | MANUFACTURING | RB | 9/6/02 | SIZE | FSCM NO. | DWG. NO. |
| FINISH | | QUAL. ASSURANCE | RFF | 9/3/02 | A | 64671 | 8820S |
| SIMILAR TO | WEIGHT (gr) | MARKETING | RG | 9/6/02 | SCALE | RELEASE DATE | SHEET 2 OF 2 |