Coaxial Bias-Tee

ZX85-12G+

50Ω Wideband 0.2 to 12000 MHz

Maximum Ratings

Operating Temperature: -55°C to 100°C
Storage Temperature: -55°C to 100°C
Voltage at DC port: 25V
DC Current: 400mA
DC resistance from DC to RF&DC port: 1.8Ω

Features

• wideband, 0.2 to 12000 MHz
• low insertion loss, 0.6 dB typ.
• high current capability, 400 mA
• small size 0.74" x 0.75" x 0.46"
• rugged unibody construction
• protected by US patent 6,790,049
• additional patent pending

Applications

• biasing amplifiers
• biasing of laser diodes
• biasing of active antennas
• DC return
• DC blocking
• test accessory

Coaxial Connections

RF OUT
RF&DC IN
DC V+

Outline Drawing

Outline Dimensions (inch/ mm)

A B C D E F G H J K L M N P Q R wt

L= low range (0.2 to 12000 MHz)
M= mid range (10 MHz to fU/2)
U= upper range (fU/2 to fU)

INSERTION LOSS* (dB) VSWR* (:1)

FREQ. (MHz)

0.2 12000

L M U L M U


0.1 0.5 0.6 1.5 1.0 2.5 1.1 1.5 1.2 1.5

Typical Performance Data

FREQUENCY (MHz)

0.20 700.00 1600.00 2400.00 3200.00 4000.00 4800.00 5600.00 6200.00 7000.00 7800.00 8600.00 9200.00 10000.00 12000.00

INSERTION LOSS (dB) with current

0mA 200mA 0mA 200mA

0.09 0.25 1.17 1.18 0.52 0.93 1.24 1.25 0.84 1.14 1.13 1.16 0.67 0.76 1.05 1.06 0.76 0.77 1.07 1.06 0.71 0.81 1.11 1.10 0.66 0.76 1.10 1.11 0.65 0.73 1.08 1.11 0.69 0.75 1.07 1.09 0.88 0.80 1.11 1.11 1.11 1.15 1.11 1.15 1.11 1.11

VSWR* (:1) with current

0mA 200mA

1.17 1.18 1.10 1.05 1.24 1.25 1.14 1.16 1.05 1.06 1.11 1.10 1.10 1.11 1.08 1.11 1.07 1.09 1.11 1.11 1.11 1.11

Bias-Tee Electrical Specifications

CASE STYLE: GC957

Connectors Model Price Qty.

SMA ZX85-12G-S+ $99.95 ea. (1-9)

+RoHS compliant in accordance with EU Directive (2002/95/EC)

The +suffix has been added in order to identify RoHS Compliance. There has been no change to the model's material, form, fit, or function. See our website for RoHS Compliance methodologies and qualifications.

Applications

Operating Temperature

-55°C to 100°C

Storage Temperature

-55°C to 100°C

RF Power

50Ω

Notes:

1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet.
2. Electrical specifications and performance data contained herein are based on Mini-Circuits' applicable established test performance criteria and measurement instructions. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"). Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp.

For detailed performance specs & shopping online see web site minicircuits.com

Mini-Circuits®

ISO 9001 ISO 14001 AS 9100 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

REV OR M10182 ED-12027/6 ZX85-12G+ DJ/RS/AM 090729

Page 1 of 2
ZX85-12G+

**INSERTION LOSS vs. TEMPERATURE**

-55°C, +25°C, -100°C

**INSERTION LOSS vs CURRENT**

0 mA, -200 mA

**VSWR RF vs TEMPERATURE**

-55°C, +25°C, -100°C

**VSWR RF vs CURRENT**

0 mA, -200 mA

---

**Notes:**
1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet.
2. Electrical specifications and performance data contained herein are based on Mini-Circuits’ applicable established test performance criteria and measurement instructions.
3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, “Standard Terms”). Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits’ website at www.minicircuits.com/MCLStore/terms.jsp.

For detailed performance specs and shopping online see web site minicircuits.com