

Coaxial Bias-Tee

50Ω Wideband 0.2 to 12000 MHz

ZX85-12G-S+



Generic photo used for illustration purposes only

CASE STYLE: GC957

Connectors	Model
SMA	ZX85-12G-S+

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Maximum Ratings

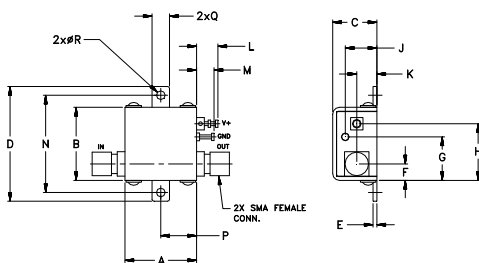
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	30dBm
Voltage at DC port	25V
DC Current	400mA
DC resistance from DC to RF&DC port	1.8Ω

Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

RF	OUT
RF&DC	IN
DC	V+

Outline Drawing



Outline Dimensions (inch)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	wt
.74	.75	.46	1.18	.04	.17	.45	.59	.33	.21	.22	.14	1.00	.37	.18	1.06	grams
18.80	19.1	11.68	30.0	1.02	4.32	11.4	14.99	8.38	5.33	5.59	3.56	25.40	9.40	4.57	2.69	23.0

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

Applications

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

Bias-Tee Electrical Specifications

FREQ. (MHz)		INSERTION LOSS* (dB)						VSWR* (:1)					
		L		M		U		L		M		U	
f _L	f _U	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Max.
0.2	12000	0.1	0.5	0.6	1.5	1.0	2.5	1.1	1.5	1.2	1.5	1.2	1.5

L= low range(f_L to 10 f_L)

M=mid range(10 f_L to f_U/2)

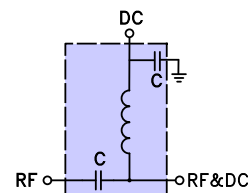
U=upper range(f_U/2 to f_U)

*Insertion Loss and VSWR are guaranteed up to 20 dBm RF power and 200mA DC current.

Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB) with current		VSWR (:1) with current	
	0mA	200mA	0mA	200mA
0.20	0.09	0.25	1.17	1.18
700.00	0.52	0.93	1.10	1.05
1600.00	1.21	0.65	1.24	1.25
2400.00	0.84	1.14	1.14	1.15
3200.00	0.67	0.76	1.05	1.06
4000.00	0.76	0.77	1.07	1.06
4800.00	0.71	0.81	1.11	1.10
5600.00	0.66	0.76	1.10	1.11
6200.00	0.65	0.73	1.08	1.11
7000.00	0.69	0.75	1.07	1.09
7800.00	0.88	0.80	1.11	1.09
8600.00	1.11	1.11	1.11	1.08
9200.00	1.11	1.15	1.07	1.07
10000.00	1.21	1.20	1.02	1.07
12000.00	1.37	1.39	1.15	1.11

Electrical Schematic



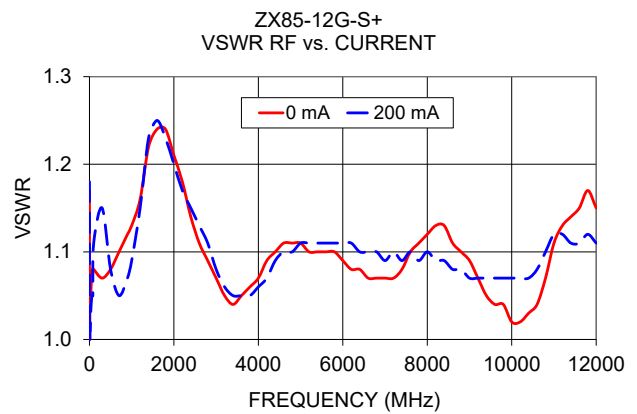
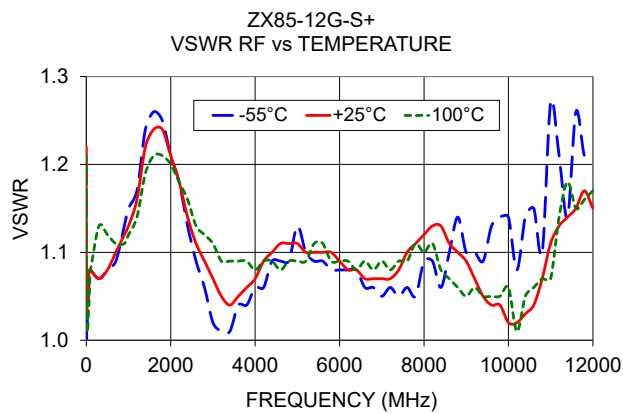
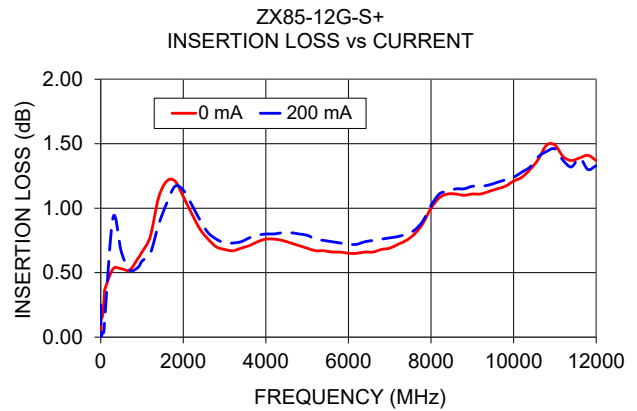
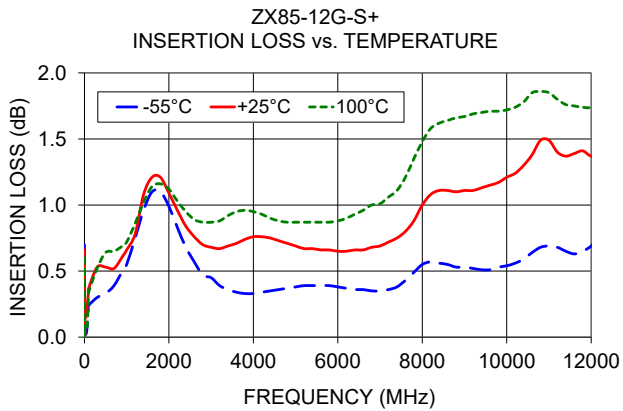
Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document 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



www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. B
M171494
ED-12027/6
ZX85-12G-S+
DJ/RS/AM
200922
Page 1 of 2



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document 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



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Mini-Circuits:](#)

[ZX85-12G-S+](#)