

Surface Mount Bias-Tee

50Ω Wideband 10 to 4200 MHz

JEBT-4R2G+ JEBT-4R2G



CASE STYLE: BL301
PRICE: \$39.95 ea. QTY. (1-9)

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

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

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power	30dBm max.
Voltage at DC port	25V max.
Input Current	500mA
DC resistance from DC to RF&DC port	4.5 ohm typ.

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

Pin Connections

RF	15
RF&DC	10
DC	24
GROUND	all other pins

Features

- wideband, 10 to 4200 MHz
- low insertion loss, 0.6 dB typ.
- good isolation, 40 dB typ.

Applications

- biasing amplifiers, laser diodes, active antenna
- DC return
- DC blocking
- satellite communication

Bias-Tee Electrical Specifications

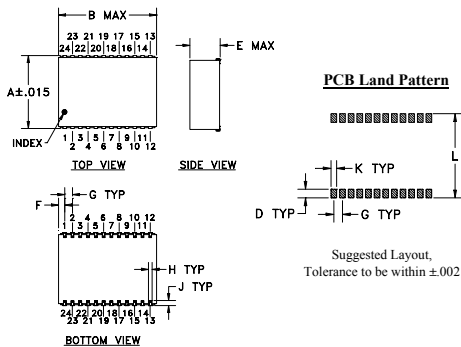
FREQUENCY (MHz)	INSERTION LOSS* (dB)						ISOLATION* (dB) (RF port to DC port) (RF&DC port to DC port)							
	f_L	f_U	L		M		U		L		M		U	
			Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.
10	4200		0.15	0.6	0.6	1.2	0.6	1.6	32	20	40	20	40	20

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 Isolation are guaranteed up to 20 dBm-RF power and 200mA DC current.

Typical Performance Data

Freq. (MHz)	Pin (dBm)	INSERTION LOSS (dB) with Current						ISOLATION (dB) (Pin=-10dBm) with current						VSWR (:1)
		0mA	20mA	50mA	100mA	150mA	200mA	10mA	20mA	50mA	100mA	150mA	200mA	
0.10	19.80	0.17	0.17	0.16	0.17	0.20	0.24	19.46	19.04	17.83	14.58	12.66	11.75	1.16
0.27	19.80	0.13	0.13	0.13	0.14	0.15	0.15	25.86	25.53	24.52	21.43	19.31	18.16	1.07
0.53	19.80	0.12	0.12	0.12	0.11	0.11	0.11	29.17	28.98	28.36	26.18	24.40	23.37	1.04
1.06	19.80	0.13	0.13	0.12	0.11	0.12	0.12	30.81	30.74	30.56	29.62	28.62	27.92	1.02
10.00	18.50	0.16	0.17	0.17	0.16	0.16	0.16	30.06	30.07	30.07	30.20	30.38	30.56	1.04
114.75	19.50	0.22	0.25	0.24	0.22	0.22	0.22	34.45	34.49	34.27	33.99	33.83	33.59	1.07
324.25	19.70	0.50	0.55	0.53	0.52	0.53	0.56	44.65	44.61	44.25	43.90	43.91	43.34	1.06
743.25	18.70	0.28	0.31	0.30	0.29	0.29	0.29	51.19	50.50	50.16	50.65	51.69	52.47	1.06
952.75	18.20	0.31	0.33	0.33	0.31	0.32	0.33	40.75	40.80	40.97	40.97	40.93	40.95	1.11
1581.25	18.00	0.46	0.48	0.47	0.46	0.48	0.49	42.58	42.59	43.94	43.77	44.36	44.17	1.13
2000.25	17.10	0.46	0.48	0.47	0.46	0.46	0.47	45.46	45.57	45.73	45.48	46.14	45.28	1.12
2524.00	14.40	0.40	0.42	0.41	0.42	0.43	0.44	53.15	53.72	52.19	53.17	52.67	53.67	1.12
3047.75	14.20	0.45	0.48	0.47	0.46	0.46	0.49	52.46	52.25	51.55	51.33	51.46	50.99	1.09
3676.25	15.10	0.73	0.74	0.75	0.75	0.75	0.75	46.32	47.19	46.36	45.53	46.19	45.65	1.07
4200.00	17.90	1.04	1.07	1.07	1.06	1.05	1.06	28.42	28.36	28.24	28.14	28.01	27.92	1.09
4502.50	-0.60	1.17	1.19	1.18	1.19	1.17	1.16	28.15	28.10	28.05	27.96	27.84	27.87	1.14
4802.00	-0.70	1.26	1.26	1.27	1.25	1.22	1.20	37.95	38.01	38.19	37.93	37.58	37.51	1.12
5251.75	-1.10	1.19	1.17	1.16	1.13	1.11	1.09	49.68	51.04	49.12	49.37	49.13	48.19	1.11
5550.75	-2.00	1.65	1.63	1.60	1.56	1.54	1.51	38.44	38.56	38.36	38.07	37.85	38.19	1.10
6000.00	-2.40	1.70	1.71	1.65	1.59	1.54	1.50	34.37	34.36	34.23	34.40	34.49	34.48	1.12

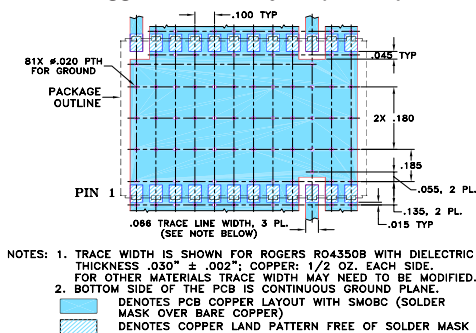
Outline Drawing



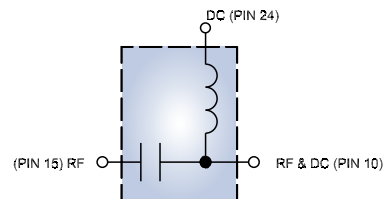
Outline Dimensions (inch/mm)

A	B	C	D	E	F
.940	1.260	--	.100	.390	.080
23.88	32.00	--	2.54	9.91	2.03
G	H	J	K	L	wt
.100	.047	.065	.065	.970	grams
2.54	1.19	1.65	1.65	24.64	7.2

Demo Board MCL P/N: TB-359 Suggested PCB Layout (PL-216)



Electrical Schematic



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

For detailed performance specs
& shopping online see web site

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

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-Circuit's 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.

REV. B
M102713
JEBT-4R2G
DJ/RS/CP
090729
Page 1 of 2

Performance Charts

JEBT-4R2G+ JEBT-4R2G

