

# Coaxial Bias-Tee

75Ω Wideband 1 to 3000 MHz

## ZFBT-33W-75-FT+



Generic photo used for illustration purposes only

CASE STYLE: K1486

Connectors Model  
N-Type ZFBT-33W-75-FT+

**+RoHS Compliant**

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

### Maximum Ratings

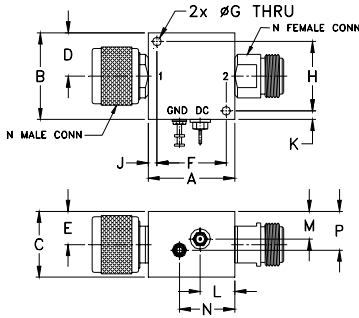
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	30 dBm max.
Voltage at DC port	25 V max.
Input Current	200 mA

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

### Coaxial Connections

RF	2 (N-female)
RF & DC	1 (N-male)
DC	(feed-through pin)
GROUND	GROUND

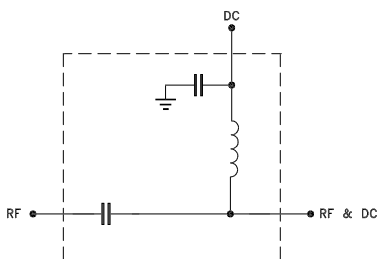
### Outline Drawing



### Outline Dimensions (inch mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	wt
1.25	1.25	.95	.63	.47	1.00	.125	1.000	.13	.13	.50	.40	.80	.56	grams
31.75	31.75	24.13	16.00	11.94	25.40	3.18	25.40	3.18	3.18	12.70	10.16	20.32	14.22	117.0

### Electrical Schematic



### Features

- wideband, 1 to 3000 MHz
- low insertion loss, 0.45 dB typ.
- feed through terminal per DC port
- excellent VSWR, 1.18:1 typ.

### Applications

- biasing amplifiers
- biasing of laser diodes
- biasing of active antennas
- test accessory

### Electrical Specifications at 25°C

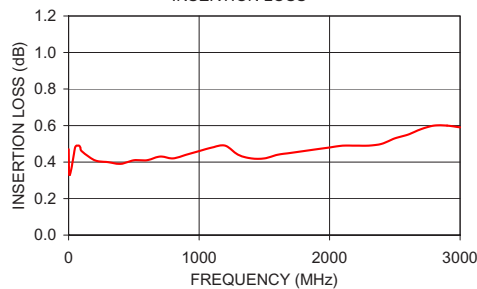
Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit
<b>Frequency Range</b>		1		3000	MHz
<b>Insertion Loss<sup>1</sup></b>	1-10	—	0.40	0.8	dB
	10-1500	—	0.45	0.9	
	1500-3000	—	0.50	1.1	
<b>VSWR<sup>1</sup></b>	1-10	—	1.10	1.3	:1
	10-1500	—	1.18	1.38	
	1500-3000	—	1.18	1.38	
<b>DC Resistance, DC to RF and DC port</b>		—	1.0	—	ohms

1. Specifications and typical performance are relevant to input RF power up to +20dBm and DC Current up to 200mA.

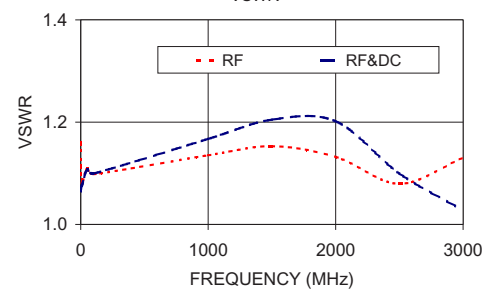
### Typical Performance Data

Frequency (MHz)	INSERTION LOSS (dB)	VSWR (:1)	
		RF	RF&DC
1	0.47	1.16	1.06
5	0.34	1.08	1.07
10	0.33	1.08	1.08
50	0.48	1.11	1.11
100	0.46	1.10	1.10
1000	0.46	1.14	1.17
1500	0.42	1.15	1.20
2000	0.48	1.13	1.20
2500	0.53	1.08	1.10
3000	0.59	1.13	1.03

ZFBT-33W-75-FT+  
INSERTION LOSS



ZFBT-33W-75-FT+  
VSWR



#### 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](http://www.minicircuits.com/MCLStore/terms.jsp)



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