

Coaxial Bias-Tee

50Ω Wideband 2.5 to 6000 MHz

ZNBT-60-1W+



CASE STYLE: K558

Connectors	Model
N-TYPE/BNC	ZNBT-60-1W+

+RoHS Compliant

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

Maximum Ratings

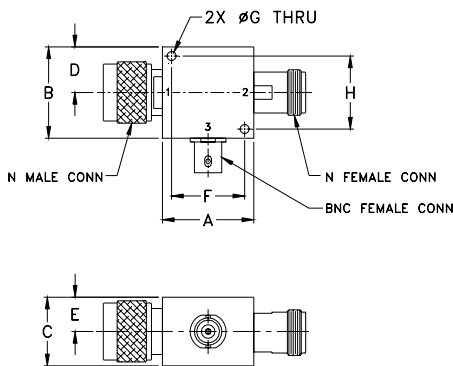
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
Input Current	500mA
RF Power	30 dBm
Voltage at DC Port	30V

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

Coaxial Connections

RF	1 (N-Type male)
RF&DC	2 (N-Type female)
DC	3 (BNC female)

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	wt
1.25	1.25	.94	.63	.47	1.00	.125	1.000	grams
31.75	31.75	23.88	16.00	11.94	25.40	3.18	25.40	117.0

Features

- wideband coverage, 2.5 to 6000 MHz
- low insertion loss, 0.6 dB typ.
- high power, 1W & current, 0.5A

Applications

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

Bias Tee Electrical Specifications

MODEL NO.	FREQ. (MHz)		INSERTION LOSS* (dB)						ISOLATION*(dB) (RF port to DC port) (RF&DC port to DC port)						VSWR** (:1)					
			L		M		U		L		M		U		L		M		U	
			f _l	f _h	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.
ZNBT60-1W+	2.5	6000	0.2	0.9	0.6	2.0	1.6	2.2	75	45	45	25	35	20	1.1	1.5	1.1	1.3	1.35	1.6

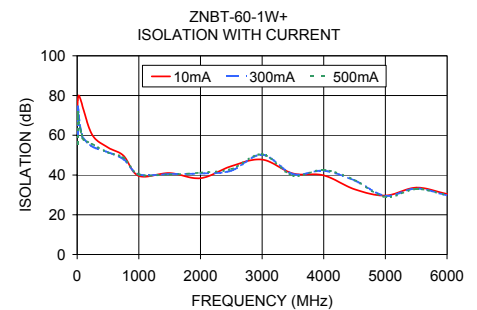
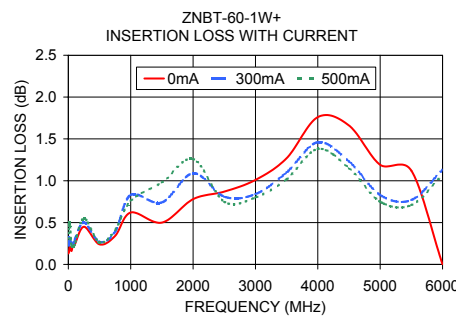
L= 2.5 - 25 MHz M= 25 - 3000 MHz U= 3000 - 6000 MHz

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

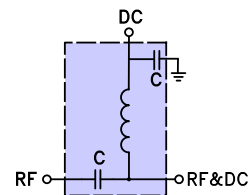
** VSWR measured with open and short at DC port.

Typical Performance Data

Freq. (MHz)	Pin (dBm)	INSERTION LOSS (dB) with current							ISOLATION (dB) (Pin=-10dBm) with current						
		0mA	100mA	200mA	300mA	400mA	500mA	10mA	100mA	200mA	300mA	400mA	500mA		
2.50	30.00	0.13	0.23	0.21	0.22	0.31	0.30	68.50	62.97	60.56	58.97	57.44	55.90		
10.00	29.97	0.15	0.20	0.24	0.32	0.30	0.42	77.66	79.59	76.96	74.04	72.52	71.45		
25.00	29.86	0.21	0.21	0.22	0.29	0.29	0.49	80.02	70.90	70.60	69.99	68.07	66.79		
50.00	30.01	0.16	0.21	0.28	0.25	0.23	0.22	78.47	64.54	64.38	63.82	63.20	62.99		
75.00	30.09	0.23	0.25	0.21	0.24	0.29	0.21	76.00	61.41	61.08	60.63	60.45	60.05		
100.00	30.16	0.23	0.29	0.30	0.29	0.30	0.23	73.21	59.27	58.85	58.49	58.33	57.99		
250.00	29.95	0.45	0.48	0.46	0.50	0.42	0.55	59.95	53.49	53.94	54.27	54.90	55.48		
500.00	29.97	0.24	0.28	0.25	0.27	0.28	0.26	53.84	51.56	51.59	51.49	51.45	51.37		
750.00	30.00	0.34	0.43	0.39	0.39	0.37	0.41	49.76	48.15	48.03	47.97	47.87	48.75		
1000.00	30.12	0.62	0.67	0.77	0.83	0.82	0.76	39.51	40.38	40.33	40.30	40.34	40.39		
1500.00	30.11	0.50	0.53	0.73	0.74	0.82	0.98	40.98	40.70	40.59	40.52	40.38	40.28		
2000.00	30.07	0.78	0.81	1.07	1.09	1.15	1.26	38.39	40.41	40.59	40.79	41.03	41.19		
2500.00	30.33	0.87	0.73	0.76	0.81	0.78	0.75	44.44	43.39	43.34	42.18	43.14	43.02		
3000.00	30.23	1.01	0.81	0.83	0.84	0.81	0.80	47.79	50.29	50.00	50.25	50.35	50.41		
3500.00	29.94	1.27	1.07	1.09	1.10	1.06	1.02	40.78	40.57	40.01	40.48	39.65	39.75		
4000.00	29.62	1.76	1.54	1.51	1.46	1.41	1.38	39.82	41.94	42.51	42.21	42.62	42.60		
4500.00	30.06	1.66	1.29	1.28	1.23	1.18	1.15	32.83	36.48	36.51	37.26	37.33	37.50		
5000.00	30.07	1.19	0.92	0.87	0.83	0.79	0.75	29.66	29.37	29.59	29.56	29.33	28.96		
5500.00	29.53	1.12	0.82	0.79	0.77	0.72	0.71	33.67	33.30	33.28	33.22	33.02	32.93		
6000.00	30.02	1.54	1.17	1.13	1.13	1.10	1.07	30.44	29.81	29.89	29.76	29.58	29.95		



Electrical Schematic



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.
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