

Coaxial Bias-Tee

ZFBT-282-1.5A+

50Ω Wideband 10 to 2800 MHz

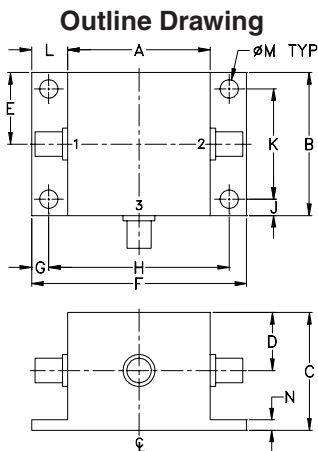
Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	30 dBm max.
Voltage at DC port	30 V max.
Input Current	1.5A*
DC resistance from DC to RF&DC port	0.5 ohm typ.

* Max Current 1.2 A above 80°C.
Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

RF	1 (SMA female)
RF&DC	2 (SMA male)
DC	3 (SMA female)



Outline Dimensions (inch mm)

A	B	C	D	E	F	G
1.25	1.25	.94	.47	.63	2.19	.25
31.75	31.75	23.88	11.94	16.00	55.63	6.35
H	J	K	L	M	N	wt
1.687	.25	.750	.47	.125	.10	grams
42.85	6.35	19.05	11.94	3.18	2.54	60.0

Features

- wideband, 10 to 2800 MHz
- low insertion loss, 0.6 dB typ.
- good isolation, 45 dB typ.
- high current, 1.5A

Applications

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

Bias-Tee Electrical Specifications

FREQUENCY (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_U	Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.
10	2800	0.5	1.0	0.6	1.0	0.8	1.6	50	30	45	30	30	20	1.16	1.35	1.10	1.20	1.08	1.35

L= low range (f_L to 10 f_L)

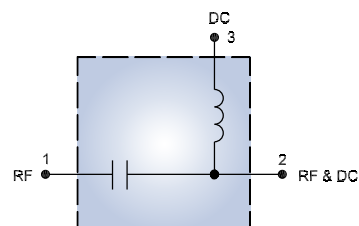
M= mid range (10 f_L to $f_U/2$)

U= upper range ($f_U/2$ to f_U)

Typical Performance Data

Freq. (MHz)	INSERTION LOSS (dB)		ISOLATION (dB)				VSWR (:1)			
			RF-DC		RF&DC-DC		RF		RF/DC	
	0A	1.5A	0A	1.5A	0A	1.5A	0A	1.5A	0A	1.5A
10.00	0.29	0.42	54.81	47.57	54.15	47.33	1.06	1.24	1.06	1.25
50.00	0.42	0.41	68.07	64.48	73.12	65.97	1.10	1.10	1.10	1.12
100.00	0.64	0.41	52.01	60.62	60.00	57.83	1.14	1.06	1.14	1.07
300.00	0.40	0.37	59.41	59.59	57.55	57.53	1.07	1.07	1.07	1.07
500.00	0.40	0.35	51.13	51.46	51.60	52.76	1.05	1.06	1.06	1.07
700.00	0.47	0.41	45.14	46.61	43.35	46.15	1.05	1.07	1.07	1.08
900.00	0.50	0.47	55.11	48.80	43.14	41.54	1.06	1.06	1.06	1.09
950.00	0.51	0.48	55.06	51.87	43.12	41.45	1.06	1.06	1.06	1.06
1000.00	0.51	0.46	52.18	56.35	44.66	41.54	1.06	1.06	1.06	1.09
1100.00	0.51	0.47	45.30	53.11	50.89	43.76	1.06	1.05	1.08	1.10
1200.00	0.51	0.47	42.03	45.81	44.47	47.09	1.06	1.06	1.08	1.09
1300.00	0.51	0.47	41.45	43.19	40.75	43.35	1.06	1.05	1.09	1.09
1400.00	0.52	0.48	40.88	42.11	38.26	39.95	1.06	1.05	1.10	1.09
1450.00	0.53	0.47	40.44	41.52	37.23	38.58	1.06	1.05	1.10	1.10
1600.00	0.57	0.51	37.75	38.77	34.31	35.38	1.07	1.06	1.11	1.10
1800.00	0.65	0.57	35.76	36.46	33.89	33.05	1.08	1.07	1.14	1.11
2000.00	0.78	0.67	35.26	36.66	35.48	34.12	1.09	1.08	1.15	1.12
2200.00	0.84	0.79	35.39	35.52	34.71	34.08	1.09	1.10	1.15	1.10
2400.00	0.94	0.88	35.29	35.6	32.29	32.06	1.11	1.12	1.17	1.11
2800.00	1.41	1.37	33.34	35.69	28.98	28.71	1.22	1.24	1.25	1.21

Electrical Schematic



Generic photo used for illustration purposes only

CASE STYLE: V1381

Connectors	Model
SMA	ZFBT-282-1.5A+

+RoHS Compliant

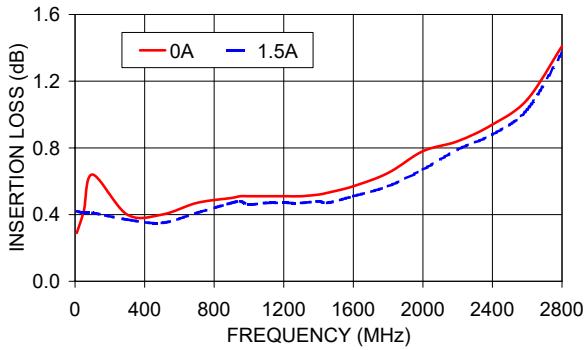
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Notes

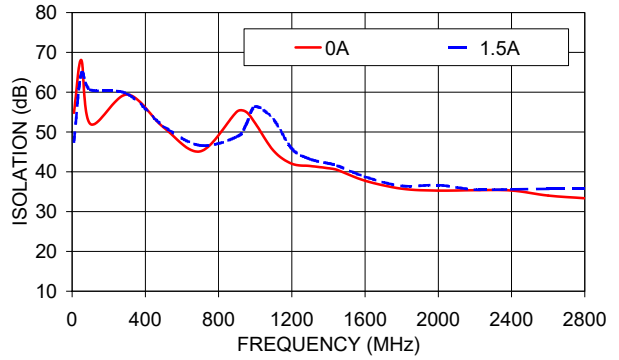
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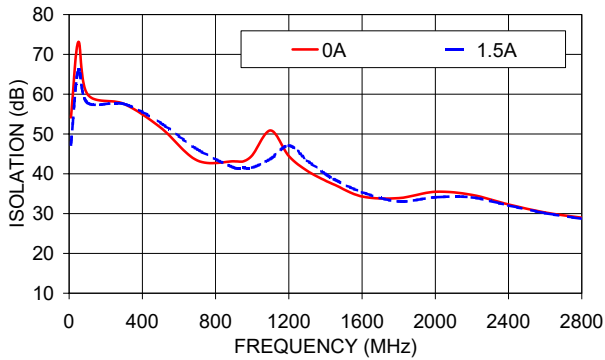
ZFBT-282-1.5A+
INSERTION LOSS



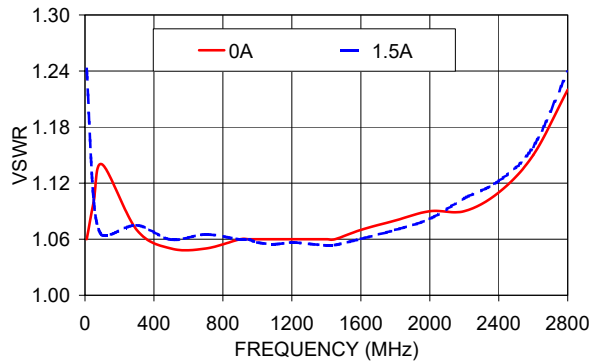
ZFBT-282-1.5A+
ISOLATION RF-DC



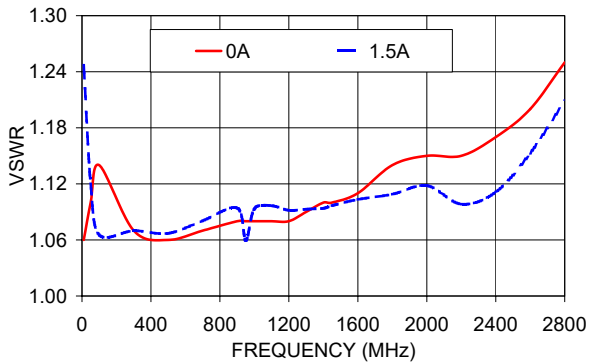
ZFBT-282-1.5A+
ISOLATION RF & DC-DC



ZFBT-282-1.5A+
VSWR RF



ZFBT-282-1.5A+
VSWR RF-DC



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