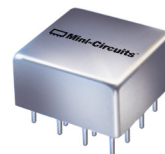


Plug-In Bias-Tee

50Ω Wideband 0.1 to 3000 MHz

PBTC-3GW+



CASE STYLE: C07

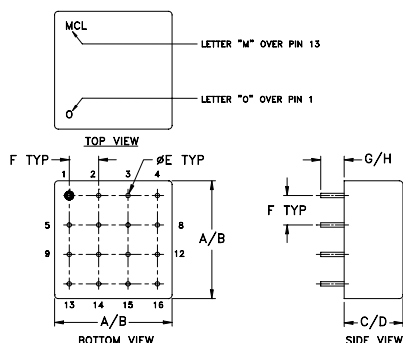
Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power	30dBm max.
Voltage at DC port	30V 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	9
RF&DC	12
DC	3
GROUND	all other pins
CASE GROUND	1,2,4,5,7,8,11,13,14,15,16

Outline Drawing



Outline Dimensions (inch mm)

A	B	C	D	E	F	G	H	wt
.770	.810	.380	.410	.030	.200	.20	.14	grams
19.56	20.57	9.65	10.41	0.76	5.08	5.08	3.56	11.0

Features

- wideband, 0.1 to 3000 MHz
- low insertion loss, 0.6 dB typ.
- hermetic, metal case

Applications

- biasing laser diodes
- biasing amplifiers
- biasing active antennas
- DC return
- DC blocking
- military, hi-rel application

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	
		Typ.	Max.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.
f _L	f _U	0.15	0.8	0.3	1.5	1.0	2.5	25	15	30	20	35	20	1.06	1.6	1.13	1.66	1.6	1.7

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 1 dB Max. and Isolation 7 dB Min. 0.1 to 0.3 MHz

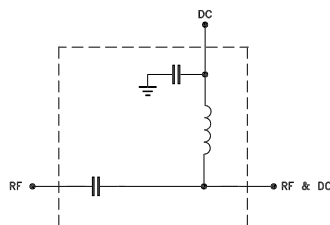
Insertion Loss and Isolation are guaranteed up to 20 dBm-RF power and 200mA DC current.

** 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							VSWR (:1)
		0mA	20mA	50mA	100mA	150mA	200mA	10mA	20mA	50mA	100mA	150mA	200mA			
0.10	19.91	0.01	0.22	0.24	0.34	0.47	0.60	16.77	16.38	15.07	12.23	10.85	10.02	1.19		
0.15	19.90	0.03	0.20	0.21	0.27	0.33	0.41	19.48	18.98	17.69	14.60	12.92	11.80	1.13		
1.00	19.20	0.02	0.15	0.15	0.15	0.15	0.16	30.27	30.21	29.76	28.40	27.06	25.91	1.02		
5.05	19.91	0.07	0.17	0.18	0.18	0.18	0.18	32.03	31.73	31.24	31.01	31.05	31.05	1.02		
7.53	19.82	0.09	0.17	0.18	0.20	0.20	0.19	31.82	31.38	30.76	30.39	30.35	30.49	1.02		
10.00	19.79	0.11	0.15	0.16	0.17	0.17	0.18	31.50	31.01	29.96	29.26	29.22	29.42	1.02		
15.00	21.83	0.14	0.18	0.18	0.21	0.21	0.15	31.07	30.42	28.95	27.53	27.08	27.10	1.02		
141.86	20.57	0.21	0.25	0.25	0.26	0.27	0.23	33.27	33.24	33.17	33.06	32.90	32.75	1.02		
276.19	20.83	0.33	0.37	0.36	0.34	0.36	0.36	33.42	33.39	33.57	33.84	33.99	34.10	1.01		
403.05	20.98	0.21	0.25	0.22	0.24	0.27	0.22	40.88	41.42	41.56	42.17	41.76	42.32	1.04		
791.10	20.55	0.24	0.27	0.28	0.30	0.32	0.29	35.93	36.18	36.01	35.69	35.76	36.04	1.13		
925.43	20.02	0.26	0.28	0.26	0.29	0.33	0.29	30.93	30.83	30.98	30.93	31.00	31.02	1.16		
1000.00	19.70	0.33	0.34	0.35	0.35	0.38	0.38	35.63	35.41	35.62	35.80	35.55	35.86	1.17		
1313.48	19.25	0.38	0.42	0.41	0.43	0.44	0.44	37.38	37.67	37.35	37.42	38.05	38.00	1.26		
1701.53	20.14	1.45	1.46	1.50	1.49	1.50	1.45	34.14	33.79	33.97	34.12	34.23	34.09	1.38		
1962.71	19.86	0.81	0.79	0.85	0.85	0.84	0.81	34.01	34.04	34.25	34.12	34.13	34.42	1.40		
2350.76	20.42	0.74	0.80	0.80	0.78	0.80	0.76	39.61	38.75	38.52	38.86	38.96	38.75	1.50		
2477.63	20.80	1.34	1.38	1.41	1.42	1.41	1.36	37.19	37.73	37.85	36.87	37.46	36.98	1.48		
2873.14	21.04	1.83	1.92	1.93	1.91	1.93	1.93	40.84	40.10	39.86	41.04	40.12	39.78	1.39		
3000.00	21.16	1.80	1.91	1.92	1.90	1.92	1.91	34.25	34.42	34.80	37.52	35.61	34.79	1.31		

Electrical Schematic



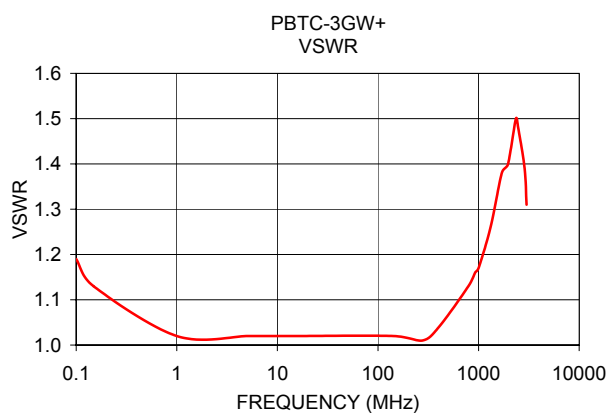
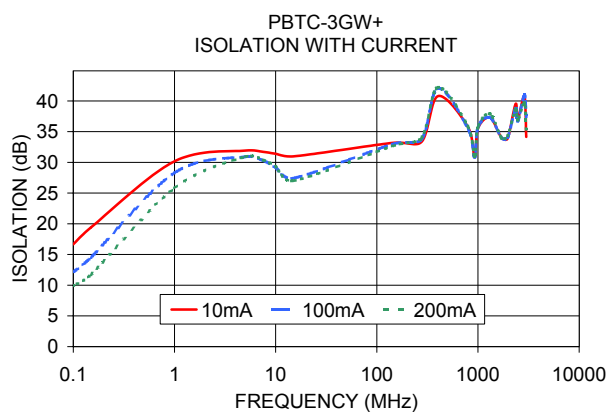
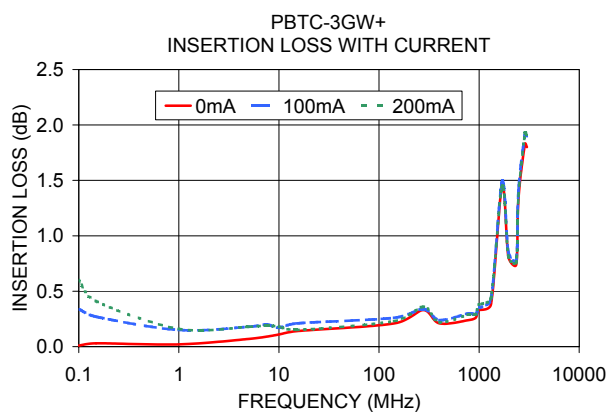
Notes

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