

30GHz Bias-Tee

The TBAT26 is a high-performance bias tee designed to operate seamlessly in high-frequency applications up to 30GHz. Engineered for superior reliability and minimal signal loss, the TBAT26 combines DC biasing with RF signal transmission in a compact and robust package. It is ideal for a wide range of applications, including telecommunications, radar systems, satellite communications, and RF testing.



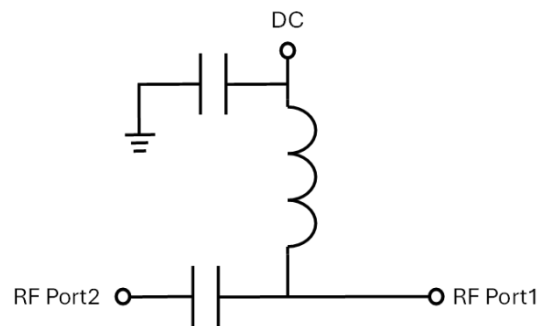
Features

- Up to 30GHz
- Low insertion loss < 2dB
- Return loss < 10dB
- 2.92mm connector

Applications

- Wireless communications
- Radar
- Test and Measurement
- Instrumentation
- Remote Sensing

Functional Diagram



Note: RF port1 and RF port2 are matched 50 Ω . Both are in 2.92mm female type. DC is in SMA female. For different connector type, please contact info@timwave.com.

Specification

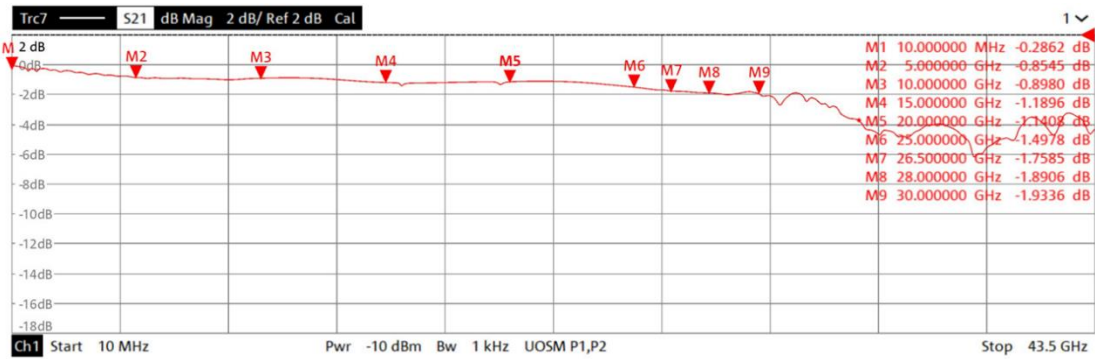
Parameters (At room temperature = 25C)	Specification		
	Min	Typ	Max
Frequency	5MHz		30GHz
Insertion Loss (dB)			
5MHz – 1GHz	0.15	0.47	0.52
1GHz – 10GHz	0.81	0.92	1.24
10GHz – 20GHz	1.12	1.37	1.82
20GHz – 30GHz	1.20	1.97	2.19
Isolation (dB)			
5MHz – 1GHz	41	50	
1GHz – 10GHz	28	41	
10GHz – 20GHz	35	37	
20GHz – 30GHz	25	31	
VSWR			
5MHz – 1GHz		1.20	1.92
1GHz – 10GHz		1.21	1.67
10GHz – 20GHz		1.32	1.79
20GHz – 30GHz		1.39	1.95
Current Handling	300mA Irms for 45C temperature rise from 25C.		
I/O	RF1: 2.92mm RF2: 2.92mm DC: SMA		

Max Rating

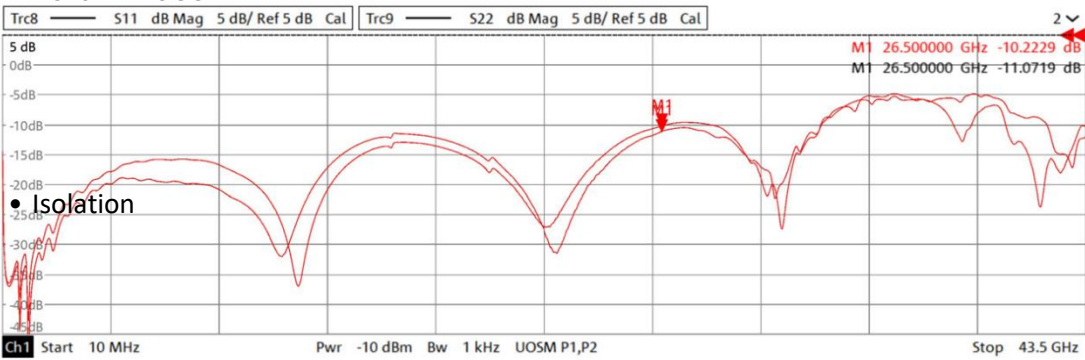
Parameters	Specifications
Operation Temperatures	-40C to 85C
Max Voltage at DC port	50V
Max Voltage Delta Between DC and RF2	10V
Max Current into DC port	300mA

Typical Measured Data

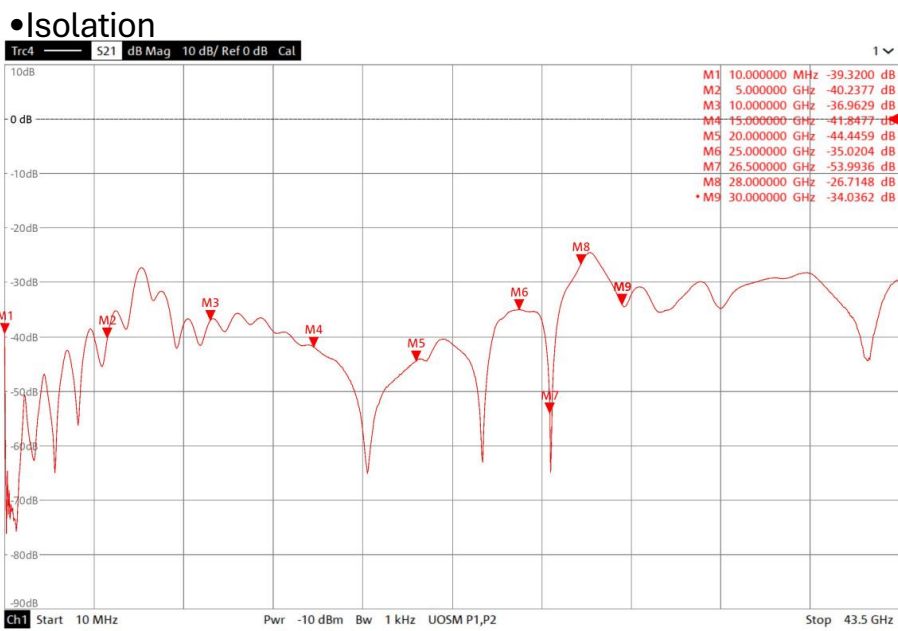
•Insertion Loss



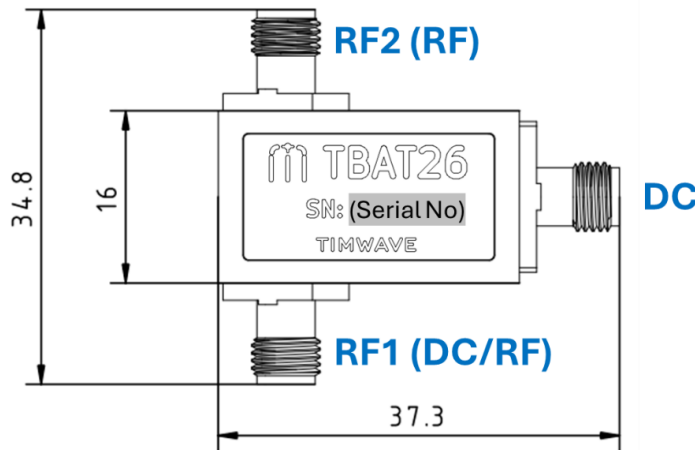
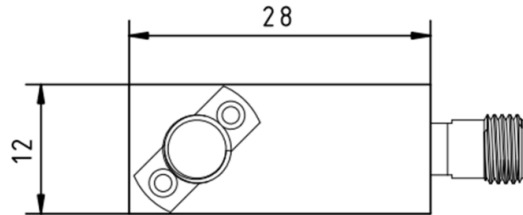
•Return Loss



•Isolation



Outline / Dimensions



(Unit: mm)

Materials

- Aluminum 6061
- Core Enclosure: gold plated 1μ"
- Cover: conductive anodized or gold plated
- Other materials can be customized.

Information:

For sales and support, please contact: info@timave.com

TIMWAVE TECHNOLOGIES COMPANY LIMITED

EU Office: Nexus Innovation Centre, UL, V94 NYD3, Co. Limerick, Ireland

Asia Office: B1, No. 92, Sec. 2 An-He Rd.

Taipei 106, Taiwan