Feature

- High Precision GaAs process
- High performance, shielded
- GaAs substrate, 50Ω CPW output
- Au wire bonding, for MCM applications

Environmental Specifications

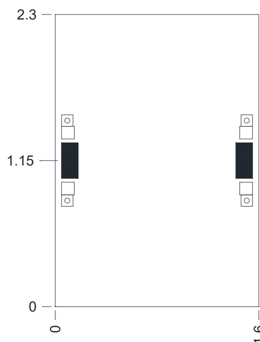
Operating Temperature	-55℃~+85℃
Storage Temperature	-65℃~+150℃
Max. Input Power	30dBm

Electrical Specifications(T_A=+25℃)

Parameter	Min.	Typ.	Max.	Unit
Center Freq. (f_0)	-	3.3	-	GHz
Pass band	3.1	-	3.5	GHz
Insertion Loss @ f_0	-	-	2.7	dB
Ripple in Pass band	-	-	1.0	dB
Return Loss	12	-	-	dB
Out of band Attenuation	⩾35@2.5GHz			dB
	⩾35@4.2GHz			dB

S2P file name： BWBF-3R1_3R5.s2p

Outline Drawing

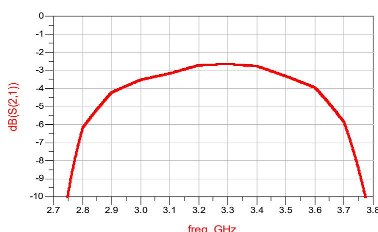


Notes:

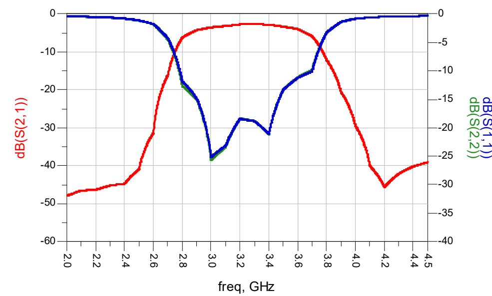
1. Dimensions are in millimeters. Tolerance: ±0.05mm
2. Die thickness is 0.1mm
3. Typical bond pad is 0.1x0.1 mm^2.
4. The bottom of the device is gold plated, should be grounded.

Typical Test Curves

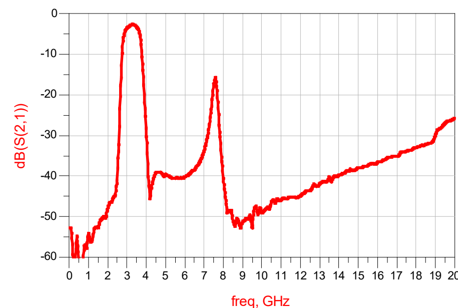
Insertion Loss VS Frequency (T_A=25℃)



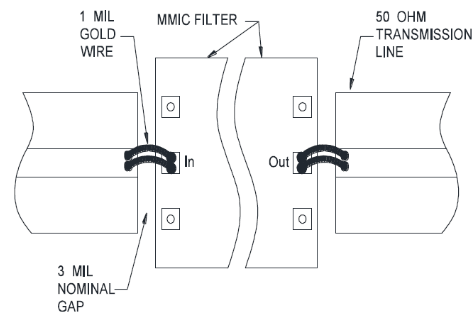
Insertion Loss & Return Loss VS Frequency (T_A=25℃)



Broadband Insertion Loss VS Frequency (T_A=25℃)



Recommended Assembly Diagrams



Application Notes:

1. The chip is back-metallized and can be die-mounted with AuSn eutectic preforms or with electrically conductive epoxy.
2. The die should be assembled on carriers like Kovar or Mu-Cu which have same Coefficient of thermal expansion. (5.8×10-6/) with GaAs.
3. Recommend using Φ25um Au wire for bonding, whose length is around 400um.
4. Sinter by AuSn (80/20), which doesn't exceed 300℃ within 30 seconds max.
4. Handle the chips in a clean environment. DO NOT attempt to clean the chip using liquid cleaning systems.
5. Handle the chip along the edges with a vacuum collet or with a sharp pair of bent tweezers.
6. The device is sensitive to ESD. ESD protection is required during storage and usage.
7. If you have any questions, please contact us.

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