



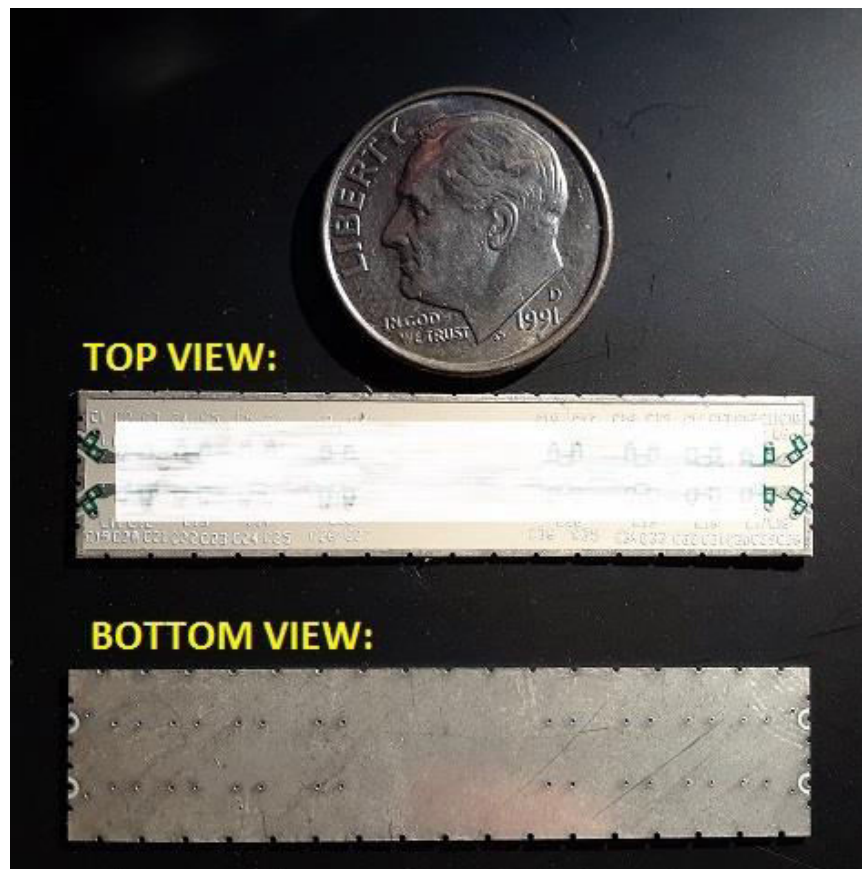
## BroadBand Surface Mount (SMT) Bi-Directional Coupler

### Features:

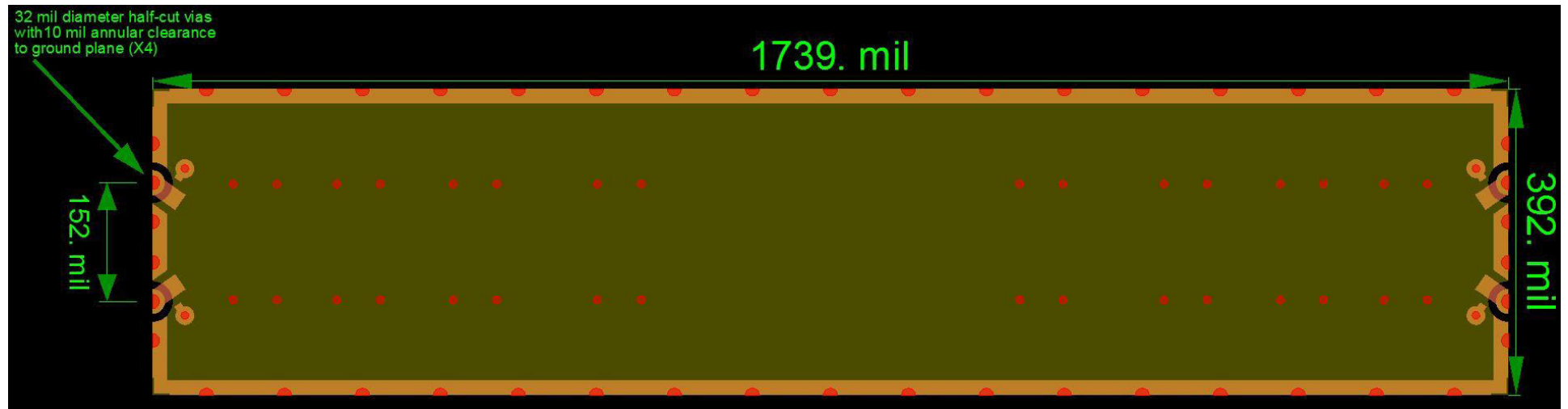
- BroadBand 0.8 to 7 GHz Operation
- Low Loss (0.6 dB at 6 GHz)
- High Directivity (> 23 dB to 6.2 GHz)
- RoHs Compliant
- Immersion Silver Finish

Datasheet Model Number: [BBTLine\\_Coupler1\\_SMT](#)

Description: Shown below is a four port, surface mount (SMT), RF Bi-Directional Coupler. The coupler has excellent performance from 0.8 GHz to > 6 GHz. Different BOM configurations allow the user to select between Directivity options. The device below is shown without components populated and without an EMI shield can (EMI shield can is optional).



### Mechanical Dimensions:

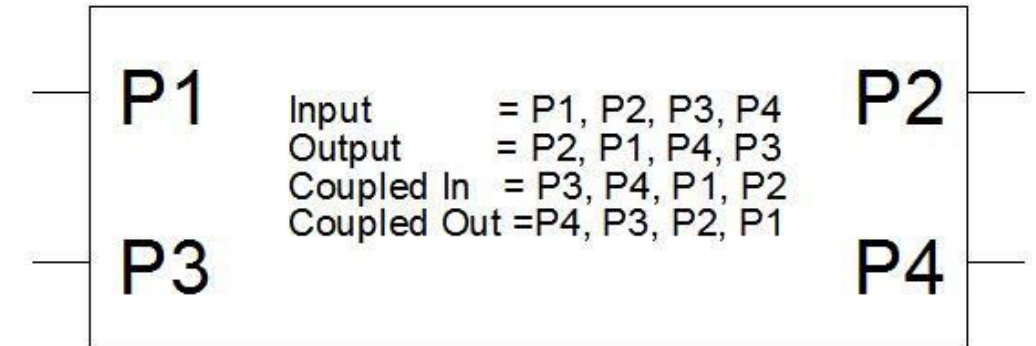
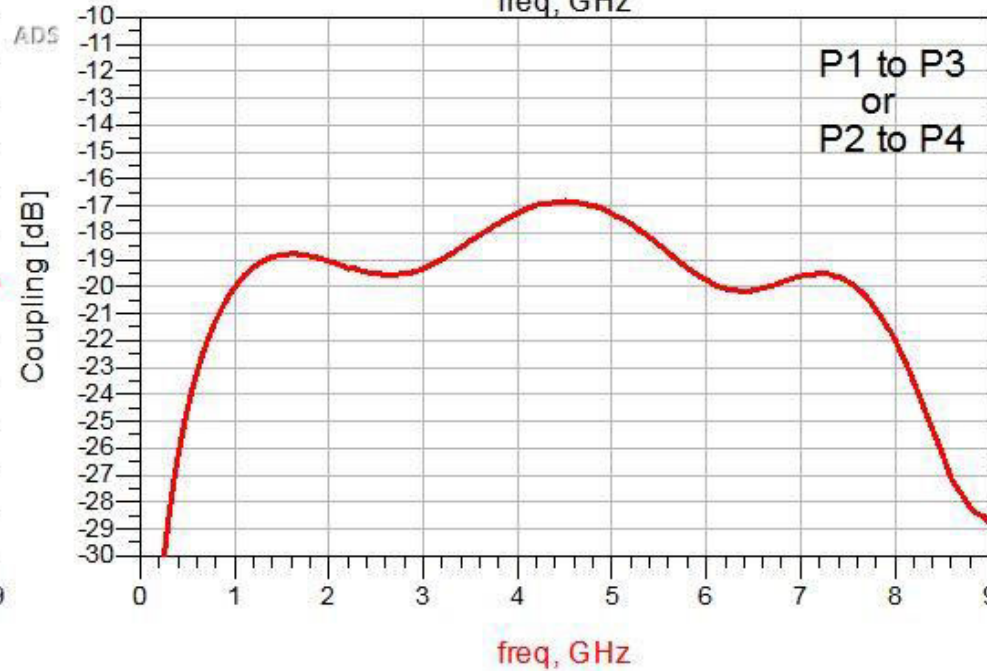
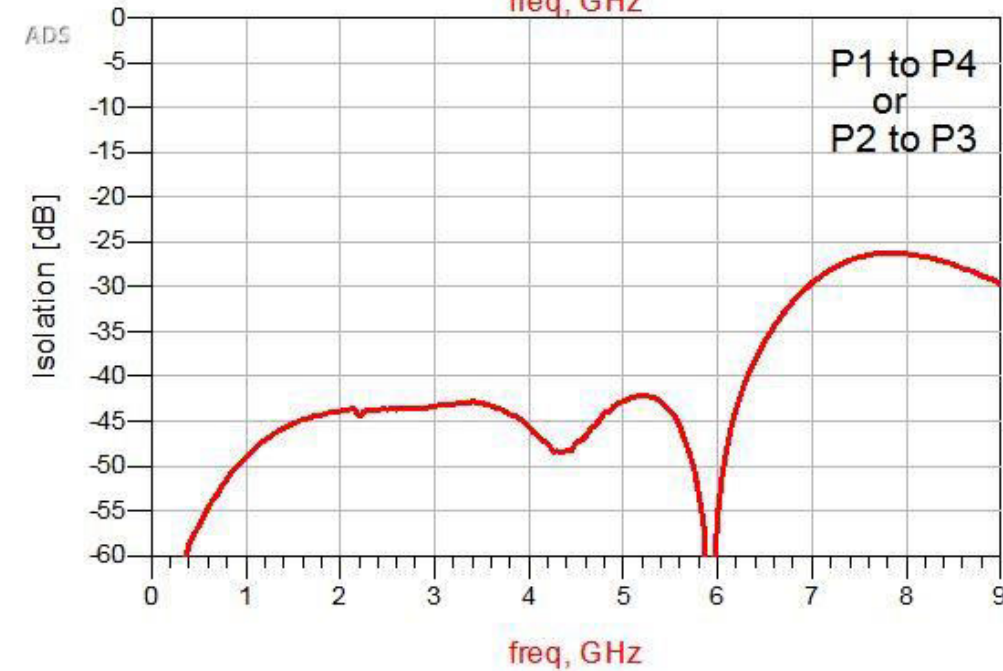
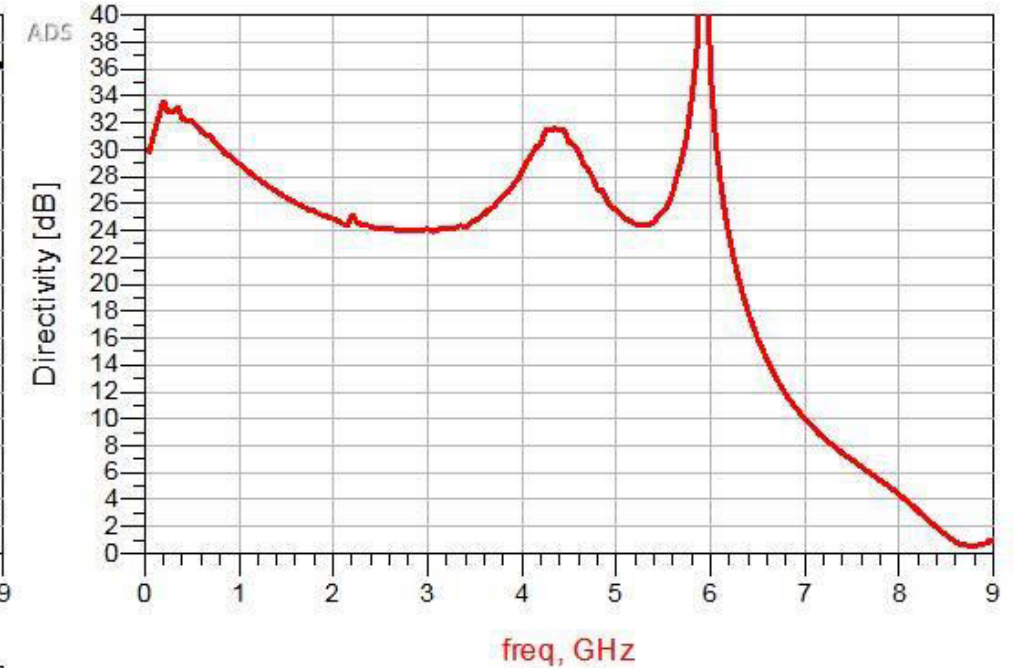
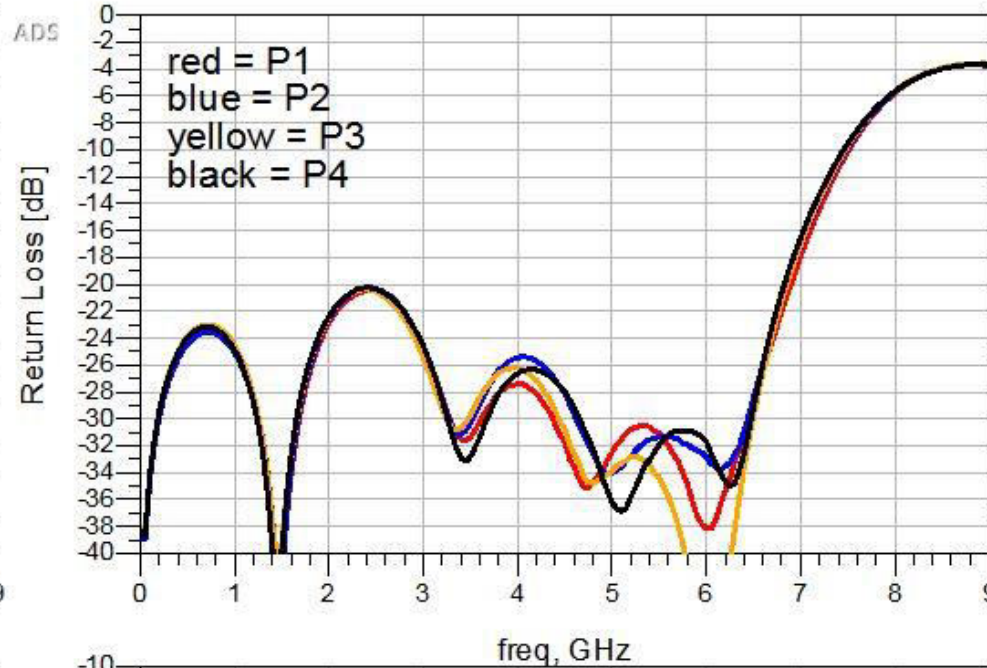
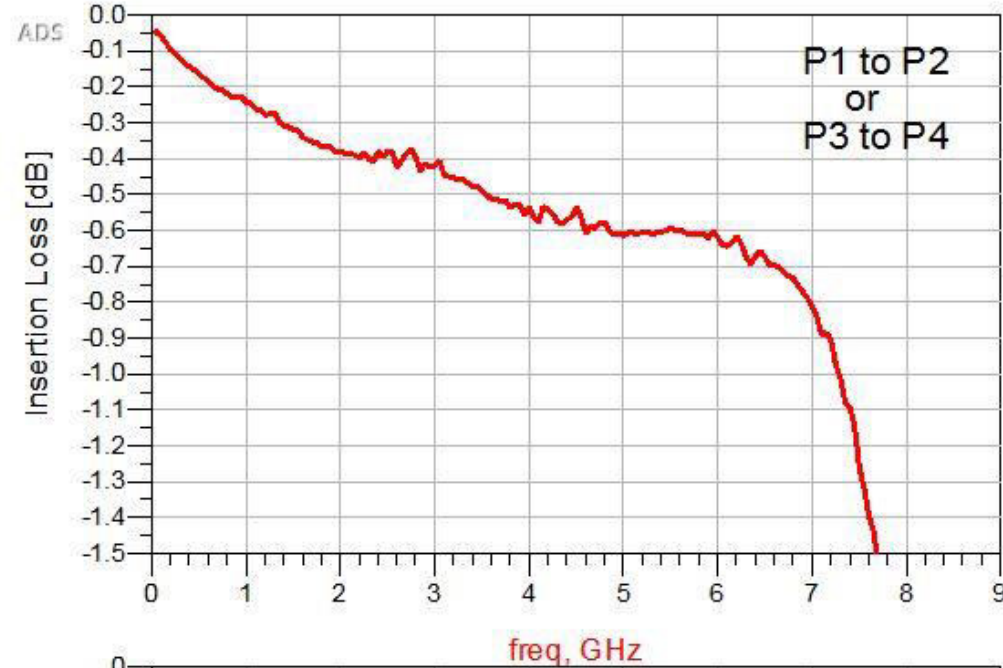


### RF Specifications:

Specifications (at Room Temperature):	BOM1 Configuration	BOM2 Configuration
Frequency Range [GHz]	0.8 to 6.2	0.8 to 6.8
Insertion Loss [dB] at 6 GHz	< 0.65	< 0.7
Directivity [dB]	> 23	> 15
Mean Coupling [dB]	-19	-19
Coupling Ripple [dB]	+/- 2	+/- 2
Return Loss [dB], All Ports	< -20	< -19
RF Power [Watts]*	>20 *	>20 *

\* Note: 20 Watts is the test setup limitation, not the coupler power-handling limitation. Tested at a CW freq of 3.55 GHz

# BOM Option #1: Higher Directivity at Lower Frequencies (> 23 dB to 6.2 GHz)





# BOM Option #2: Lower Directivity To Higher Frequencies (>15 dB to 6.9 GHz)

