



H3-MABA-011082

5-8000MHz 50Ω 1:1 Ratio Balun

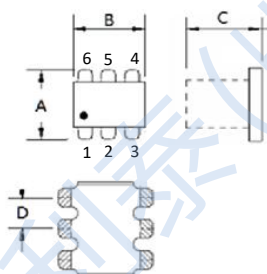
• APPLICATIONS

- Differential modulator/demodulator and active mixers
- Wideband push-pull amplifiers
- LTE, Cellular, PCS, UMTS, WiFi, WiMAX

• FEATURES

- Surface mount
- Impedance ratio: 1:1
- Available on tape and reel
- RoHS compliant and Pb free
- 260°C reflow compatible

DIMENSIONS

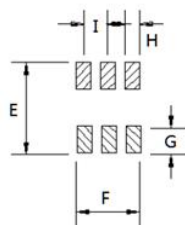


A	B	C
3.81	3.81	3.45 Max
D		
1.27		

Unless otherwise stated dimensions are in mm

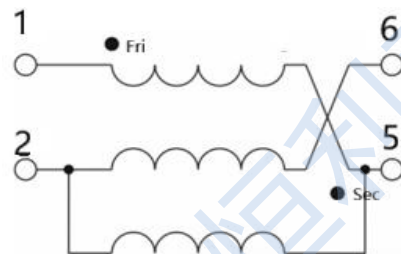
Tolerance: .xx ± 0.25, .xxx ± 0.05

Land Pattern



E	F	G
4.83	3.30	1.40
H	J	
0.76	1.27	

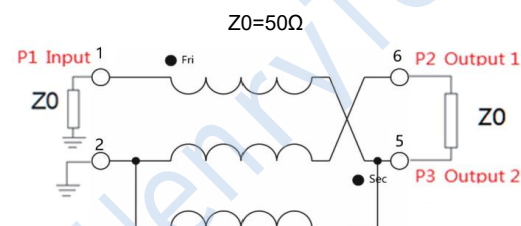
FUNCTIONAL SCHEMATIC



PIN CONFIGURATION

Pin No.	Function
1	Primary Dot (Input)
2	Primary (Ground)
3	Not used (Ground)
4	Not used (Ground)
5	Secondary Dot (Output 2)
6	Secondary (Output 1)

APPLICATION & TEST CIRCUIT



ABSOLUTE MAXIMUM RATINGS

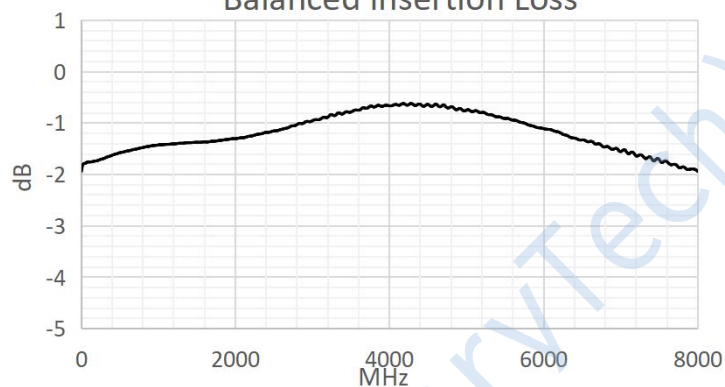
Parameter	Value
Input Power	1W MAX
DC Current	1A MAX
Operating Temperature Range	-55 to 85°C

ELECTRICAL SPECIFICATIONS@25°C:

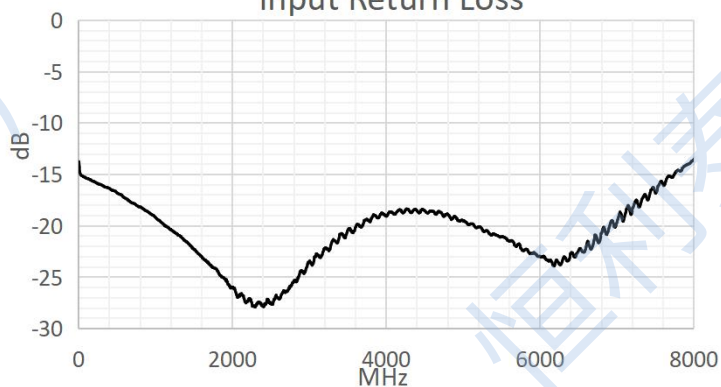
Parameters (P#: ENA PORT)	frequency band	Min.	Typ.	Max.	Unit
Port Impedance, Z0 (P1 / P2 / P3)			50/ 25/ 25		Ohm
Balanced Insertion Loss	5-500MHz		1.6	1.9	dB
	500-1000MHz		1.4	1.6	dB
	1000-6000MHz		1.3	1.7	dB
	6000-8000MHz		1.9	2.6	dB
Amplitude Balance	5-3000MHz		0.4	0.8	dB
	3000-8000MHz		2.2	3.1	dB
Phase Unbalance	5-500MHz		5	8	°
	500-8000MHz		12	20	°
Input Return Loss (Pin 1)	5-500MHz	13.0	17		dB
	500-3000MHz	10.0	18		dB
	3000-7000MHz	6.0	16		dB
	7000-8000MHz	5.0	13		dB
Output Return Loss (Pin 5-6)	5-5500MHz	9.0	14		dB
	5500-8000MHz	5.0	13		dB

TEST CURVE

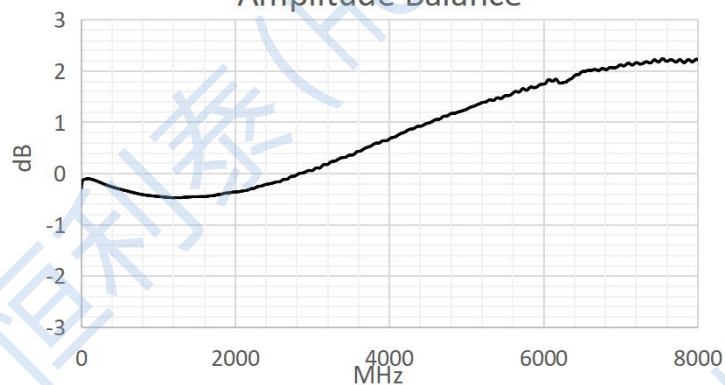
Balanced Insertion Loss



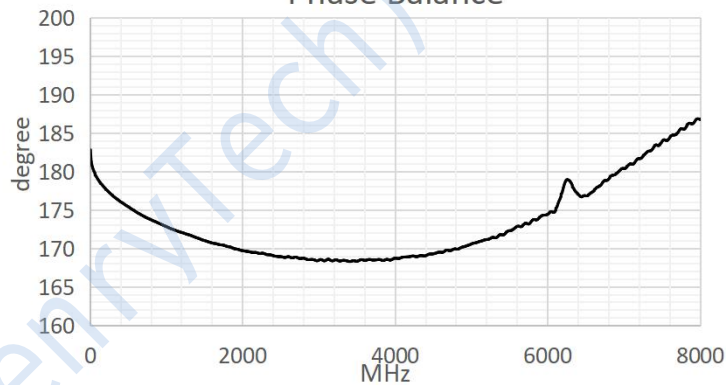
Input Return Loss



Amplitude Balance



Phase Balance



Balanced Output Return Loss

