

Balun Transformer(0.4-500MHz)

Features

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

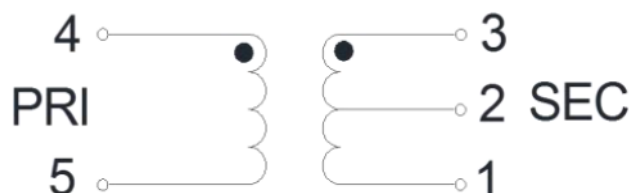
Description

SCOPE

- MCBT1-1-076 is a 1:1 Balun transformer in a SMT package.

APPLICATION

- Ideally suited for high volume cellular and wireless applications.

Functional Schematic**Pin Configuration**

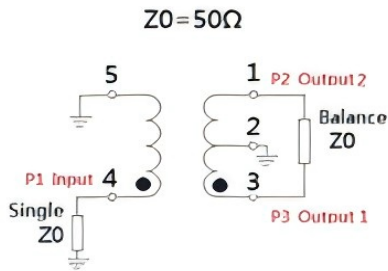
Pin #	Function	Pin #	Function
1	Secondary	4	Primary Dot
2	Secondary CT	5	Primary
3	Secondary Dot		

ELECTRICAL SPECIFICATIONS@25°C

Parameters (P#: ENA PORT)	frequency band	Min.	Typ.	Max.	Unit
Port Impedance, Z0 (P1 / P2 / P3)			50/25/25		Ohm
Insertion Loss	1-100MHz		0.5	1.0	dB
	0.5-300MHz		1.1	2.0	dB
	0.4-500MHz		2.2	3.0	dB
Return Loss	1-100MHz	15.0	18.0		dB
	0.5-300MHz	7.0	10.0		dB
	0.4-500MHz	5.0	7.0		dB
Amplitude Balance	1-100MHz		0.1	±0.5	dB
	0.5-300MHz		0.3	±1.0	dB
	0.4-500MHz		0.9	±1.5	dB
Phase Balance (Nominal 180°)	1-100MHz		1.0	±5	Deg
	0.5-300MHz		2.0	±7	Deg
	0.4-500MHz		3.0	±10	Deg
CMRR	1-100MHz	30	45		dB
	0.5-300MHz	25	34		dB
	0.4-500MHz	20	26		dB

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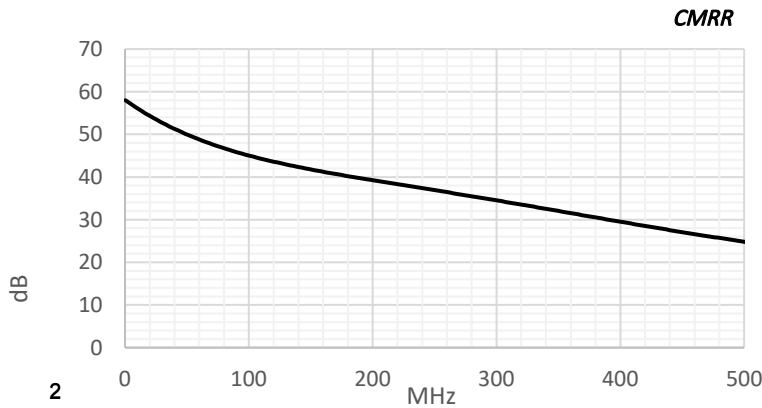
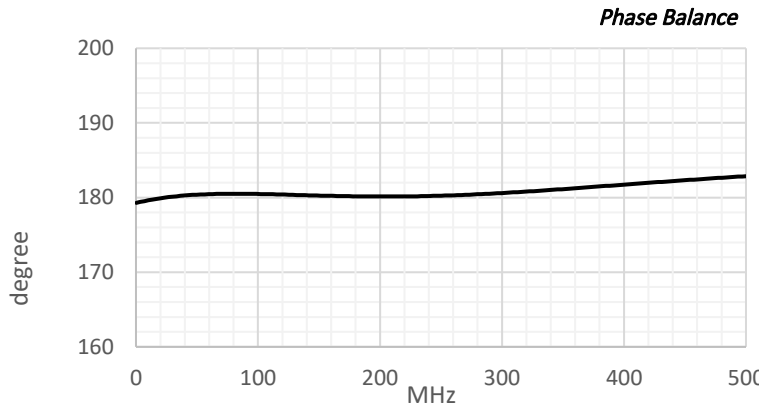
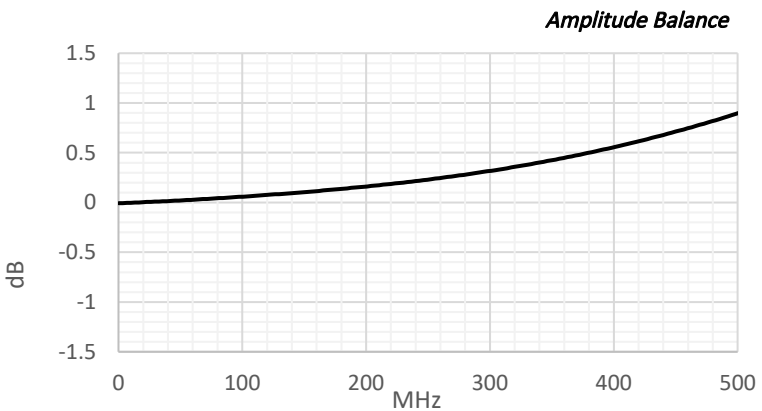
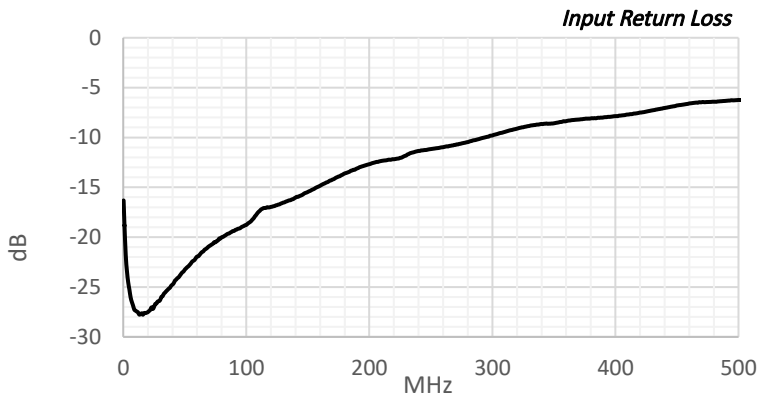
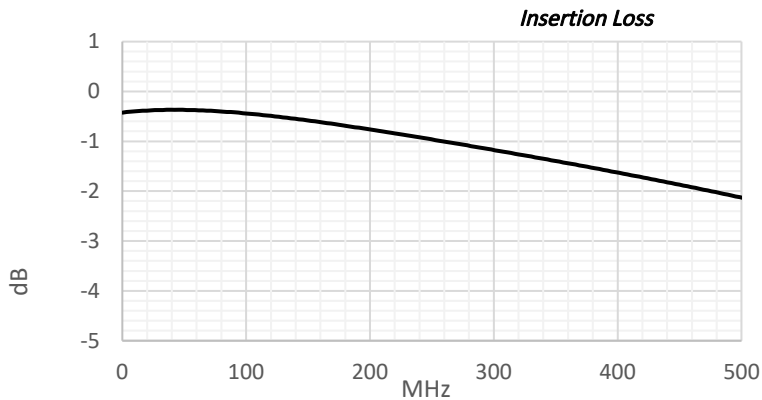
Application & Test Circuit



Absolute Maximum Ratings

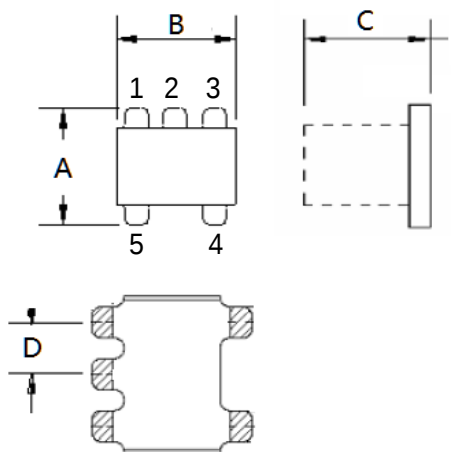
Parameter	Value
Input Power	250mW MAX
DC Current	30mA MAX
Operating Temperature Range	-40 to 85°C

Test Curve



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Dimensions

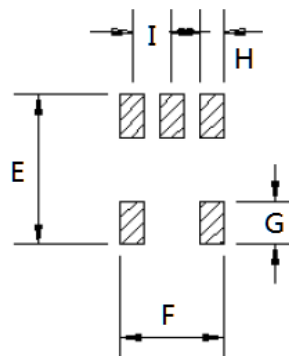


A	B	C
3.81	3.81	2.90Max
D		
1.27		

Unless otherwise stated dimensions are in mm

Tolerance: .xx ± 0.25, .xxx ± 0.05

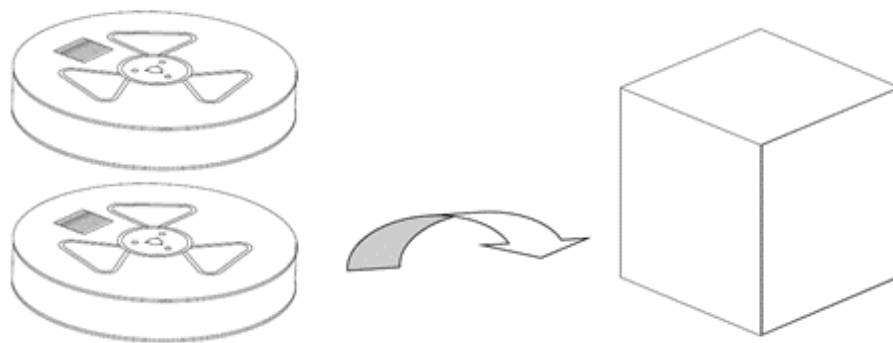
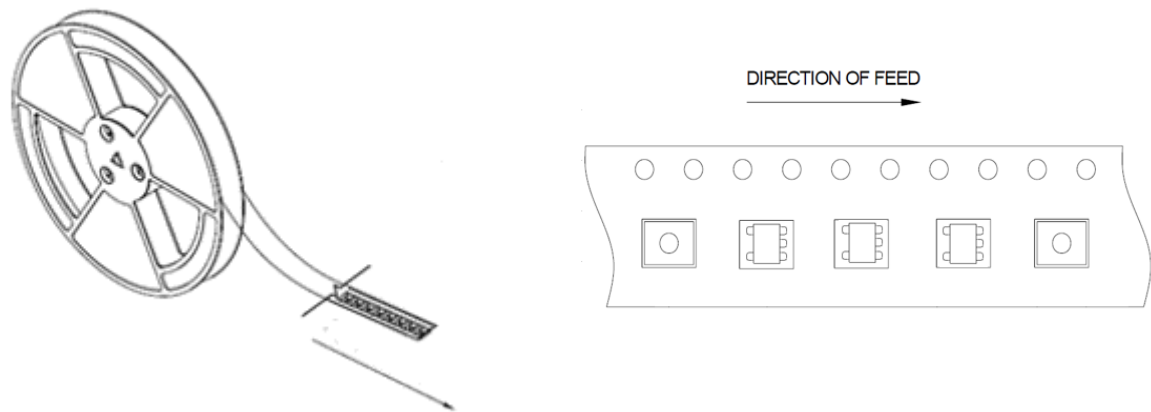
Land Pattern



E	F	G
4.83	3.30	1.40
H	J	
0.76	1.27	

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Packing



Ten Reel

Export Carton

Quantity per reel: 2000 pcs

Quantity per export carton: 20000 pcs