

Balun Transformer(500-4500MHz)

Features

- Surface mount
- Impedance ratio: 1:1
- Centre tap on secondary
- RoHS compliant and Pb free
- Available on tape and reel

Description

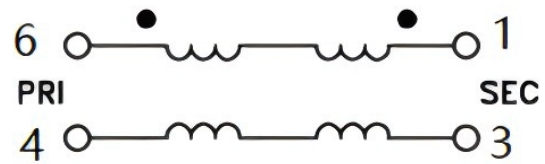
SCOPE

- MCBT1-1-241 is a 1:1 balun transformer in a SMT package.

APPLICATIONS

- balanced to unbalanced transformation
- push-pull amplifiers
- PCS/DCS,MMDS

Functional Schematic



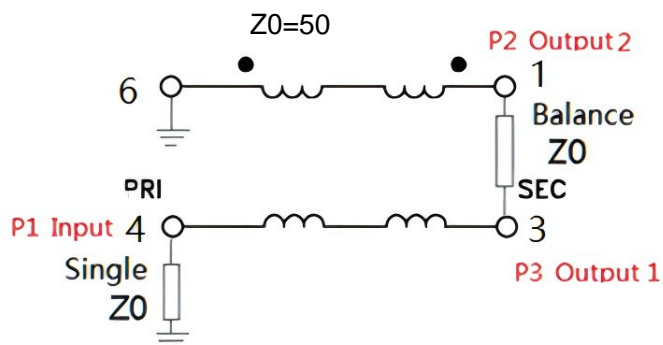
Pin Configuration

Pin #	Function	Pin #	Function
1	Secondary Dot	4	Primary
2	Not Used	6	Primary Dot
3	Secondary		

ELECTRICAL SPECIFICATIONS@25°C

Parameters (P#: ENA PORT)	frequency band	Min.	Typ.	Max.	Unit
Port Impedance, Z ₀ (P1 / P2 / P3)			50 /25 25		Ohm
Insertion Loss	500-4500MHz		2.0	3.0	dB
	800-3000MHz		1.0	2.0	dB
Amplitude Balance	500-4500MHz		0.5		dB
Phase Balance	500-4500MHz		8.0		Deg

Application & Test Circuit



RF ports: P1/P2/P3

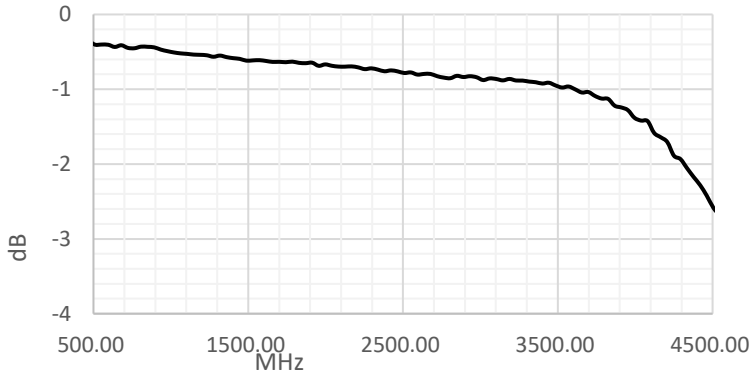
Absolute Maximum Ratings

Parameter	Value
Input RF Power	250mW MAX
DC Current	30mA MAX
Operating Temperature Range	-40 to 85°C
Storage Temperature Range	-55 to 100°C

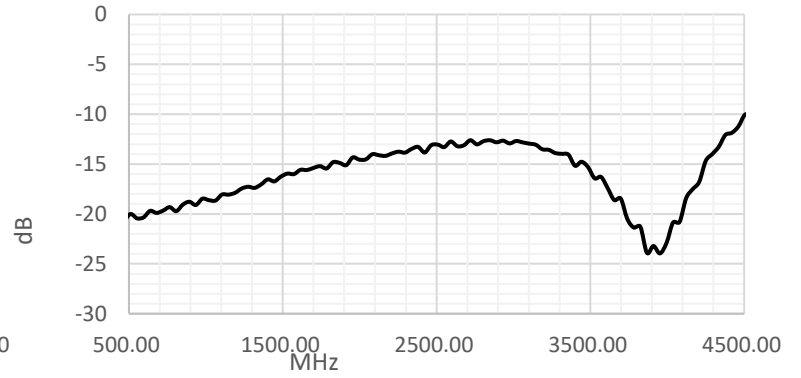
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Test Curve

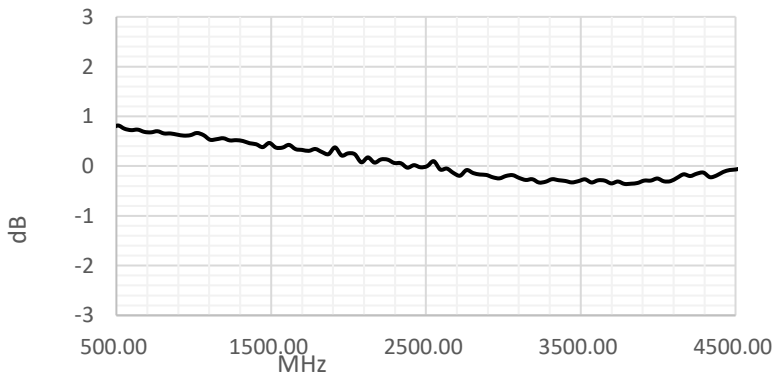
Insertion Loss



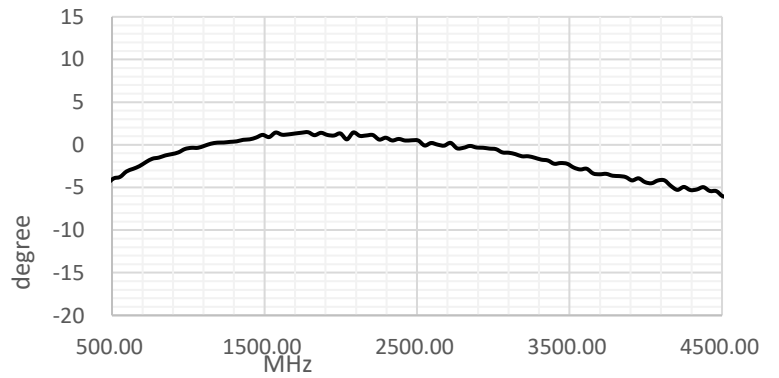
Input Return Loss



Applitude Balance

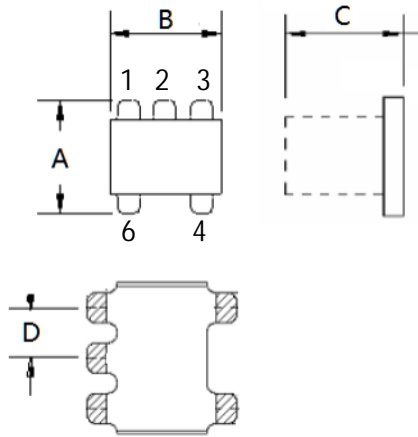


Phase Balance

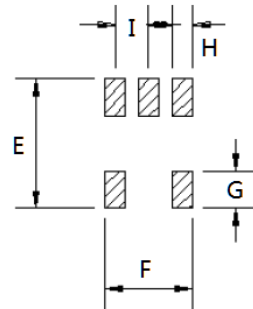


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Dimensions



Land Pattern



A	B	C
3.81	3.81	4.00Max
D		
1.27		

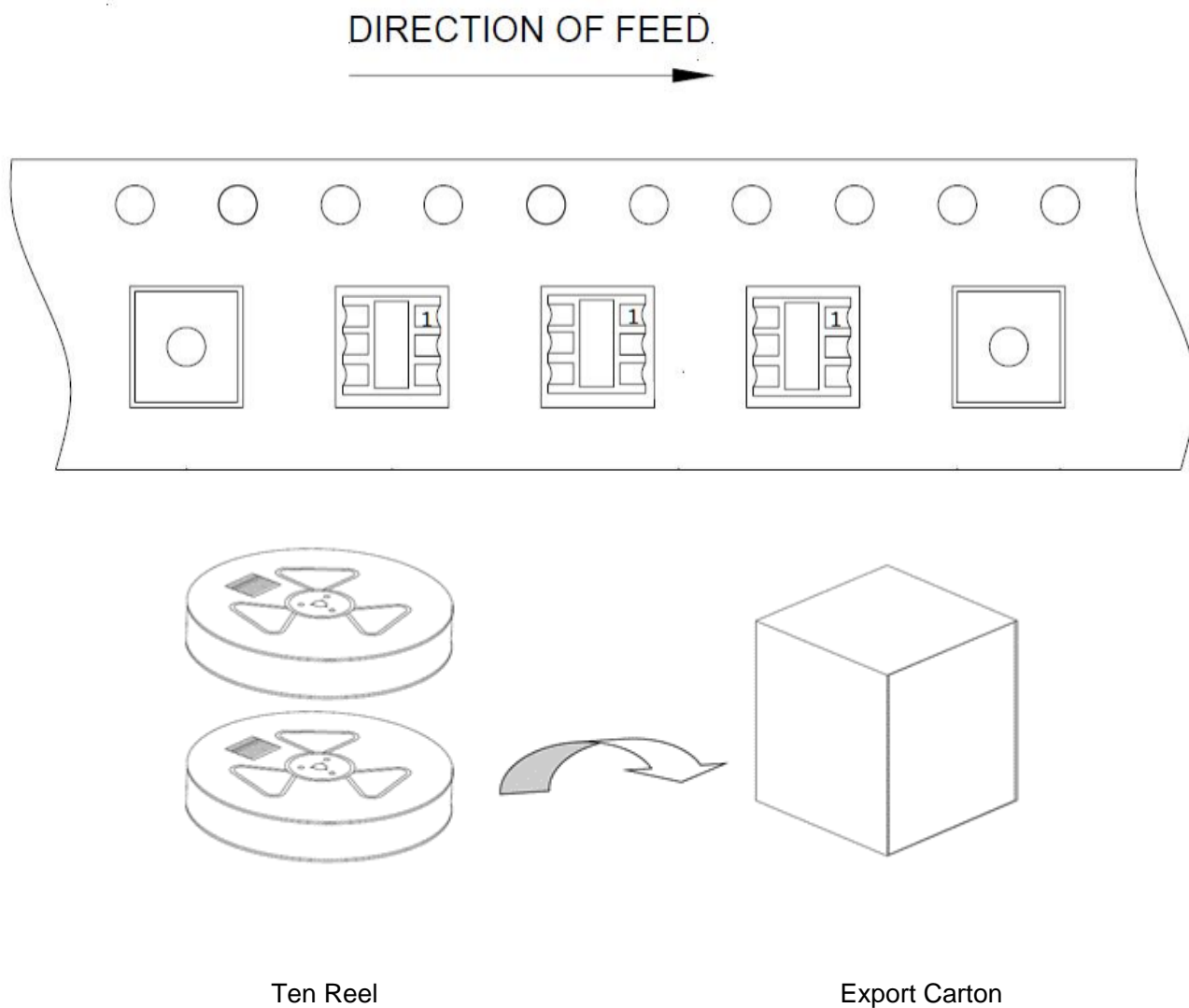
E	F	G
4.83	3.30	1.40
H	J	
0.76	1.27	

Unless otherwise stated dimensions are in mm

Tolerance: .xx ± 0.25, .xxx ± 0.05

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Packing



Quantity per reel: 2000 pcs

Quantity per export carton: 20000 pcs