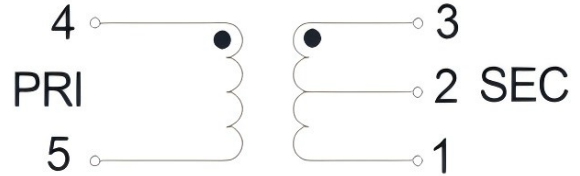


Balun Transformer(0.6-160MHz)

Features

- Surface mount
- Impedance ratio: 1:16
- RoHS compliant and Pb free
- Available on tape and reel
- 260°C reflow compatible
- CT on Secondary

Functional Schematic



Description

SCOPE

- MCBT16-1-225 is a 1:16 Balun transformer in a SMT package.

APPLICATION

- Ideally suited for high volume cellular and wireless applications.

Pin Configuration

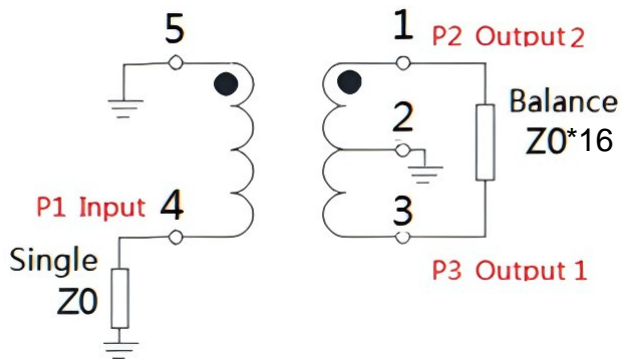
Pin #	Function	Pin #	Function
1	Secondary Dot	4	Primary
2	Secondary CT	5	Primary Dot
3	Secondary		

ELECTRICAL SPECIFICATIONS@25°C

Parameters (P#: ENA PORT)	frequency band	Min.	Typ.	Max.	Unit
Port Impedance, Z ₀ (P1 / P2 / P3)			50/400/400		Ohm
Insertion Loss	0.6-160MHz		1.8	3.0	dB
	1.5-120MHz		1.2	2.0	dB
	3-80MHz		0.8	1.0	dB

Application & Test Circuit

$$Z_0 = 50\Omega$$



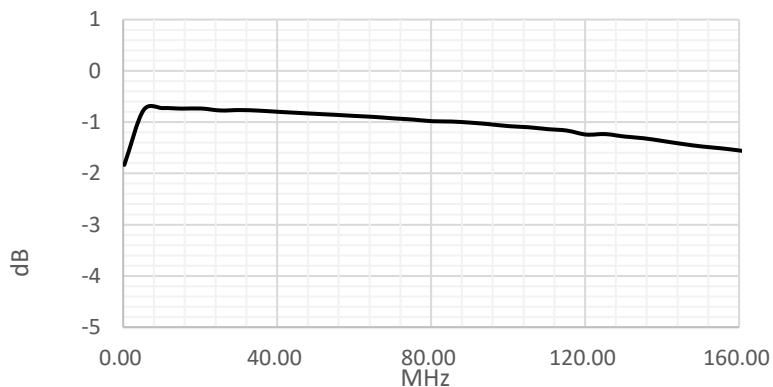
Absolute Maximum Ratings

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

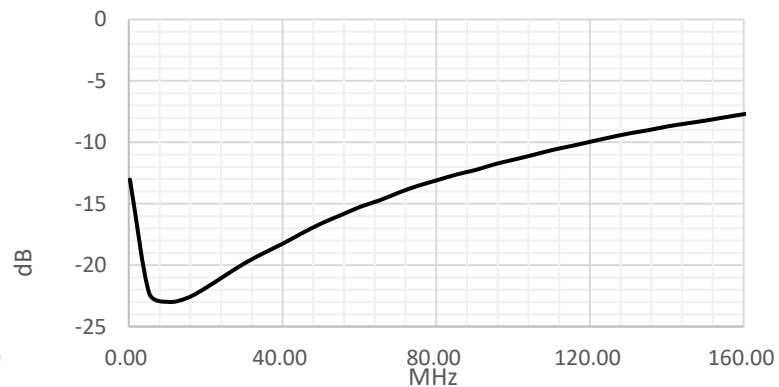
Balun Transformer(0.6-160MHz)

Test Curve

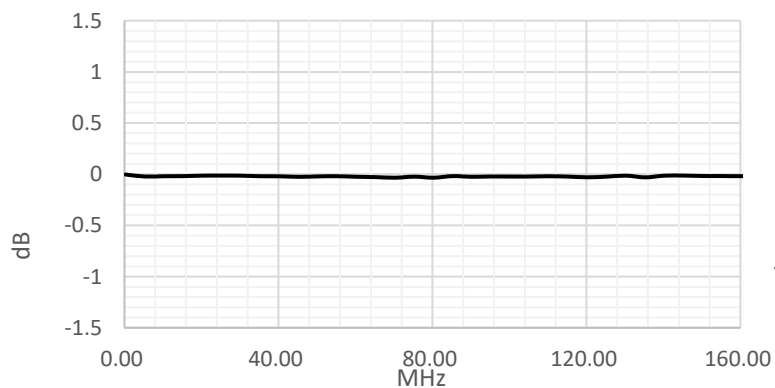
Insertion Loss: Pin 4 to Pin 3



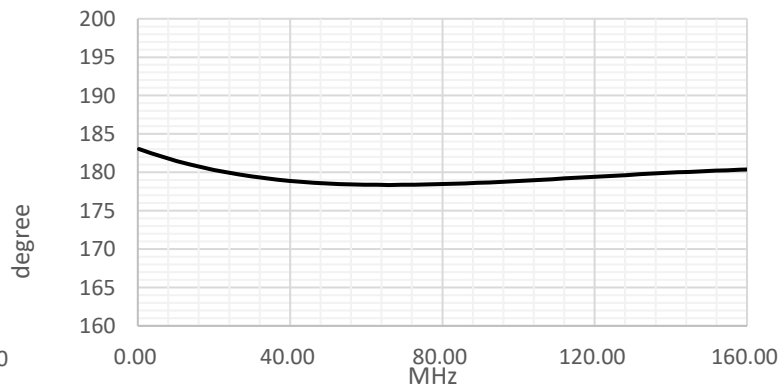
Input Return Loss: Pin 4



Amplitude Balance



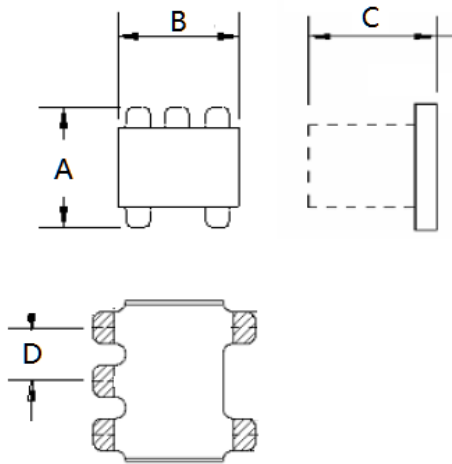
Phase Balance



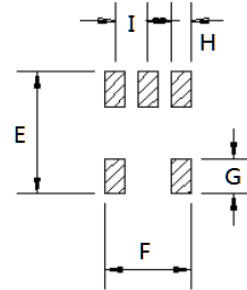
MCBT16-1-225

Balun Transformer(0.6-160MHz)

Dimensions



Land Pattern



A	B	C
3.81	3.81	2.90Max
D		
1.27		

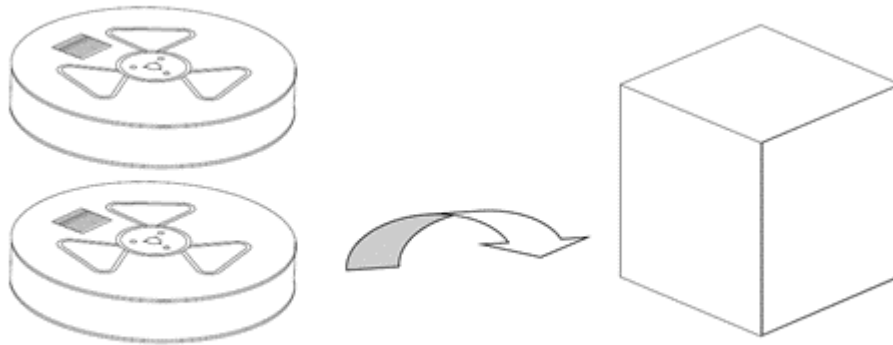
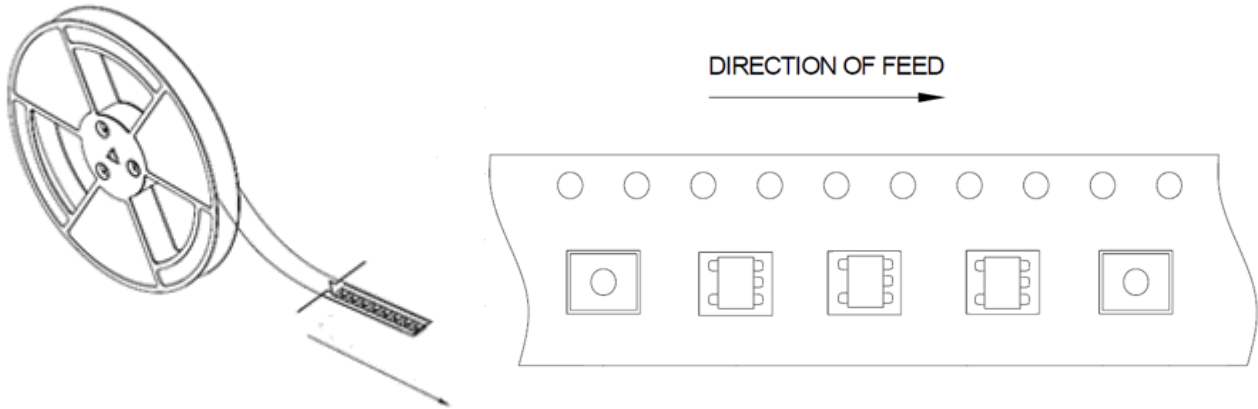
E	F	G
4.83	3.30	1.40
H	I	
0.76	1.27	

Unless otherwise stated dimensions are in mm

Tolerance: .xx ± 0.25, .xxx ± 0.05

Balun Transformer(0.6-160MHz)

Packing



Ten Reel

Export Carton

Quantity per reel: 2000 pcs
Quantity per export carton: 20000 pcs