

RF Transformer(5-1200MHz)

Features

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

Description

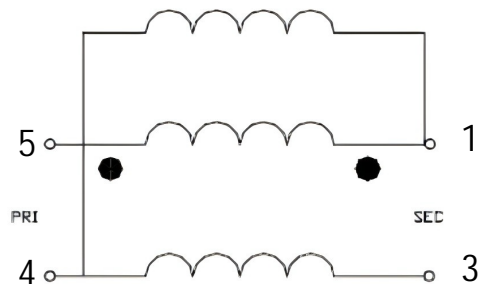
SCOPE

- MCRT1-1-146 is a 1:1 RF transformer in a SMT package.

APPLICATIONS

- Ideally suited for high volume cellular and wireless applications.

Functional Schematic



Pin Configuration

Pin #	Function	Pin #	Function
1	Secondary Dot	4	Primary
2	Not Connected	5	Primary Dot
3	Secondary		

ELECTRICAL SPECIFICATIONS@25°C

Parameters (P#: ENA PORT)	frequency band	Min.	Typ.	Max.	Unit
Port Impedance, Z0			75		Ohm
Insertion Loss	5-40MHz		0.2	0.5	dB
	40-600MHz		0.3	1.0	dB
	600-1000MHz		0.6	2.0	dB
	1000-1200MHz		1.6	3.0	dB
Return Loss	5-40MHz	17.0	27.0		dB
	40-200MHz	22.0	29.0		dB
	200-400MHz	15.0	22.0		dB
	400-600MHz	10.0	17.0		dB
	600-1200MHz	6.0	11.0		dB
Amplitude Balance	5-1200MHz		0.4	1.0	dB
Phase Balance (Nominal 180 °)	5-1000MHz		0.6	10	Deg
	1000-1200MHz		9.2	20	Deg

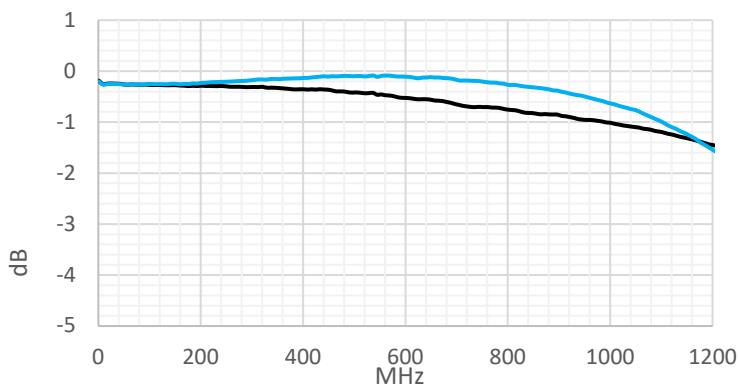
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Absolute Maximum Ratings

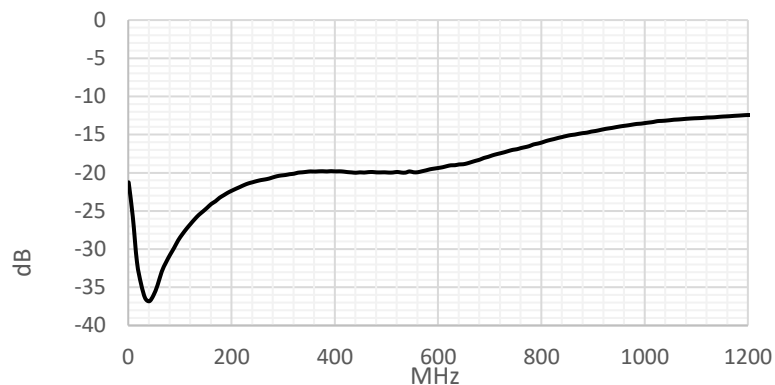
Parameter	Value
Input Power	250mW MAX
DC Current	30mA MAX
Operating Temperature Range	-20 to 85°C
Storage Temperature Range	-20 to 85°C

Test Curve

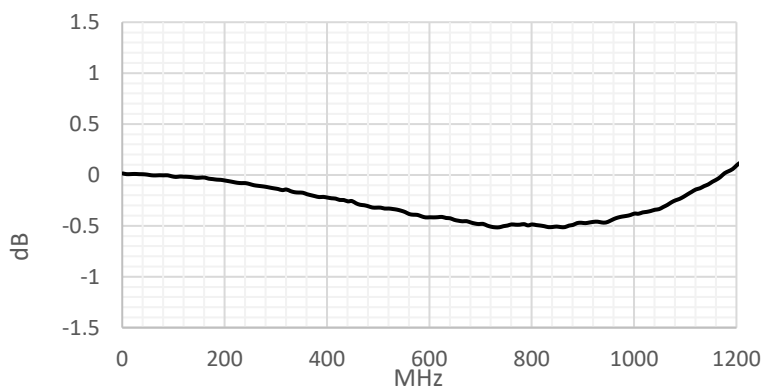
Insertion Loss



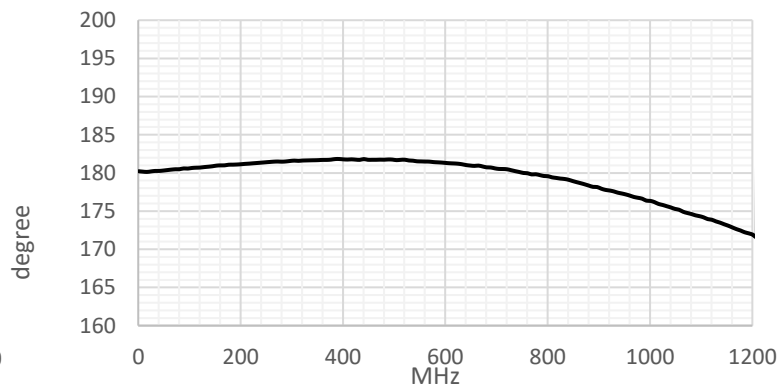
Input Return Loss



Applitude Balance



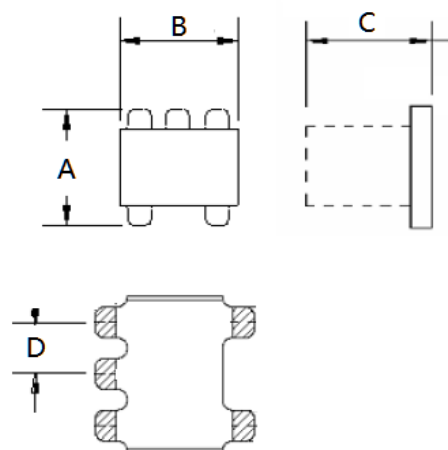
Phase Balance



MCRT1-1-146

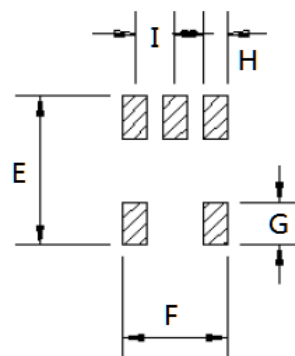
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Dimensions



A	B	C
3.81	3.81	3.81 Max
D		
1.27		

Land Pattern



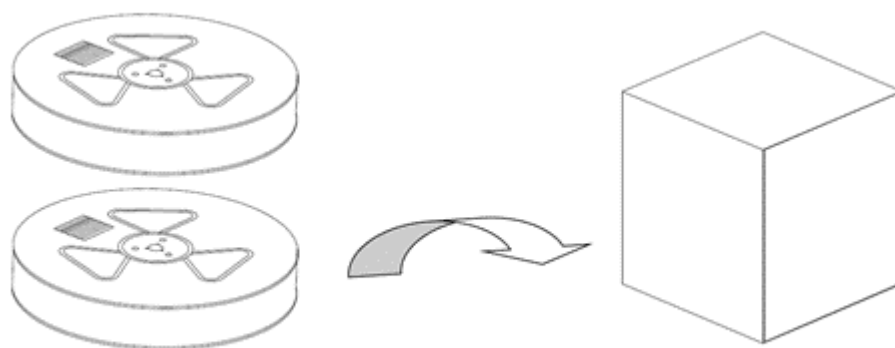
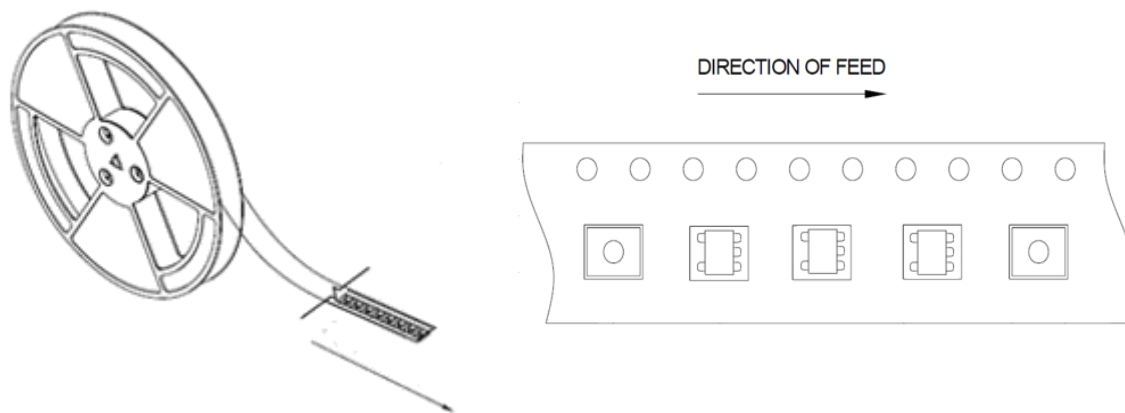
E	F	G
4.83	3.30	1.40
H	J	
0.76	1.27	

Unless otherwise stated dimensions are in mm

Tolerance: .xx ± 0.25, .xxx ± 0.05

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Packing



Ten Reel

Export Carton

Quantity per reel: 2000 pcs

Quantity per export carton: 20000 pcs