



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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MABA-010441-CT38A0

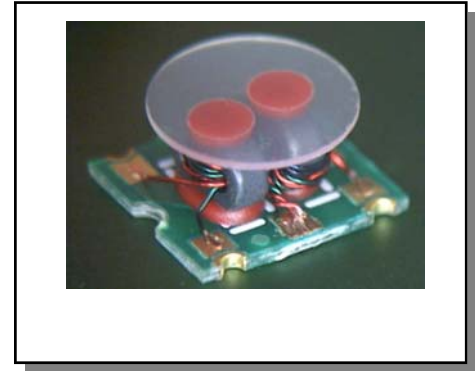


Transformer, 1:3
5 MHz - 1200MHz

Rev. V1

Features

- ◆ 1:3 impedance ratio
- ◆ Surface mount
- ◆ Available on tape and reel
- ◆ 260°C reflow compatible
- ◆ RoHS Compliant and Pb free
- ◆ Excellent temperature stability
- ◆ Can be used on 50Ω and 75Ω systems



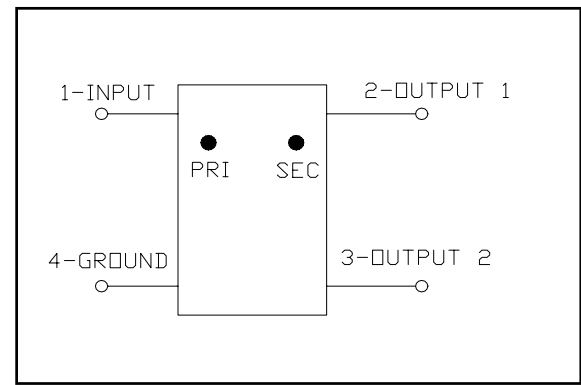
Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25^\circ\text{C}$, $P_{in} = 0\text{dBm}$

Parameter	Conditions	Units	Min	Typ	Max
Frequency Range		MHz	5		1200
Impedance		Ω		75	
Impedance Ratio				1:3	
Insertion Loss1 Pin1 to Pin2	5 - 50 MHz	dB	-	0.75	1.20
	50 - 1000 MHz	dB	-	1.10	1.90
	1000 - 1200 MHz	dB	-	1.75	2.25
Insertion Loss2 Pin1 to Pin3	5 - 50 MHz	dB	-	0.70	1.30
	50 - 1000 MHz	dB	-	1.10	2.20
	1000 - 1200 MHz	dB	-	1.90	2.50
Amplitude Unbalance	5 - 50 MHz	dB	-	0.02	± 0.70
	50 - 1000 MHz	dB	-	0.05	± 0.70
	1000 - 1200 MHz	dB	-	0.15	± 0.80
Phase Balance	5 - 50 MHz	dB	-	0.6	± 5.0
	50 - 1200 MHz	dB	-	6.6	± 10.0
Input Return Loss	5 - 50 MHz	dB	19	21	-
	50 - 1000 MHz	dB	15	21	-
	1000 - 1200 MHz	dB	15	24	-

Pin Configuration

Pin No.	Function
1	Input (PRI dot)
2	Output 1 (SEC dot)
3	Output 2 (SEC)
4	Ground (PRI)

Schematic



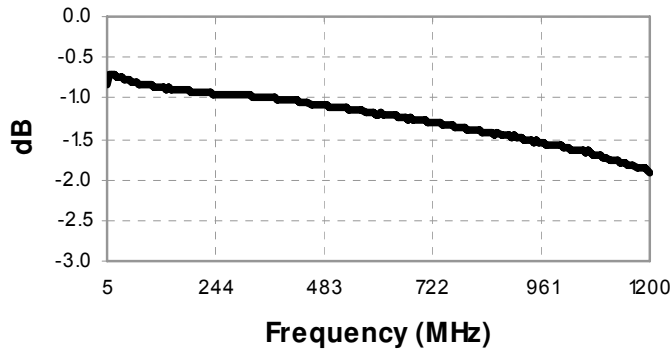
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PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

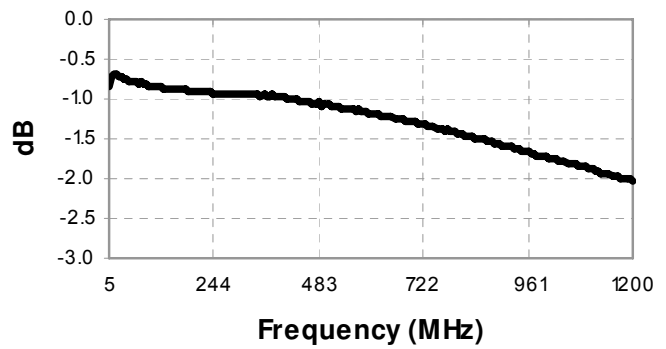
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 • **India** Tel: +91.80.43537383 • **China** Tel: +86.21.2407.1588
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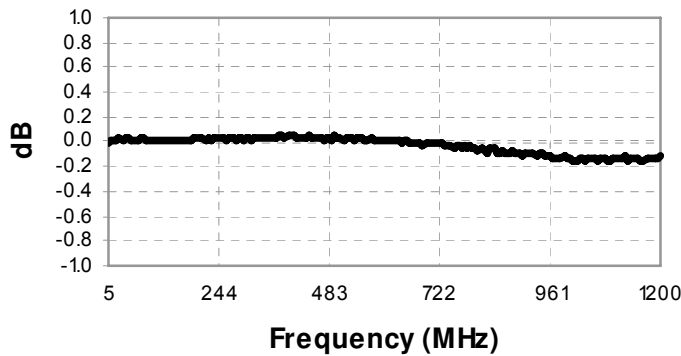
Insertion Loss: Pin1—Pin2



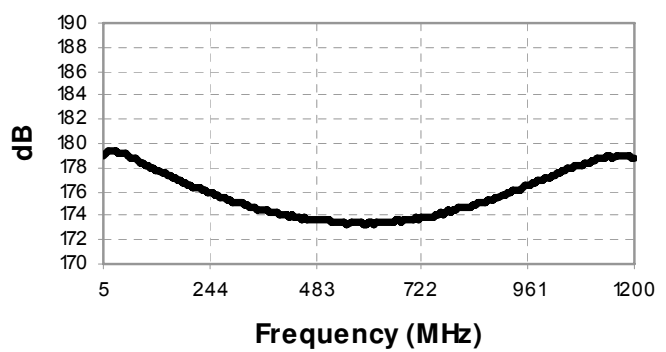
Insertion Loss: Pin1—Pin3



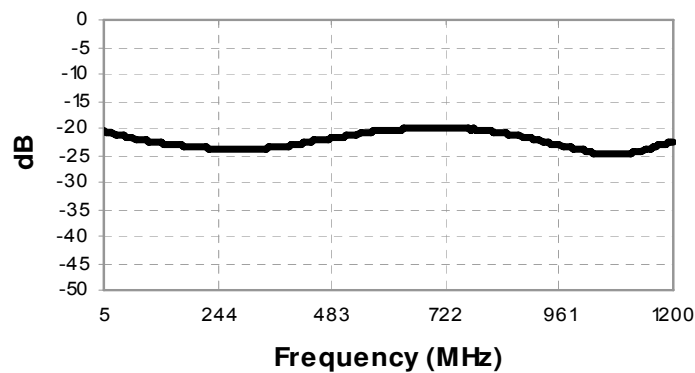
Amplitude Balance



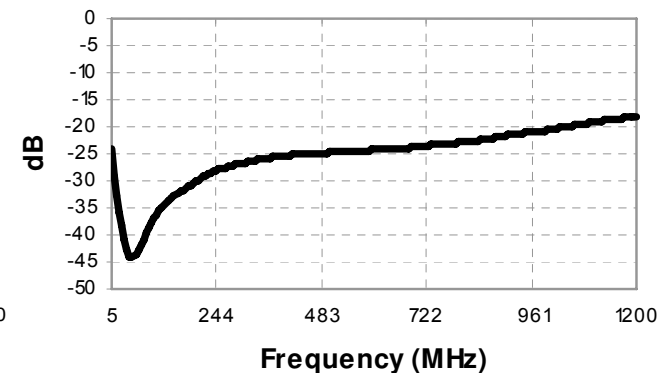
Phase Balance



Return Loss: Input



Return Loss: Output



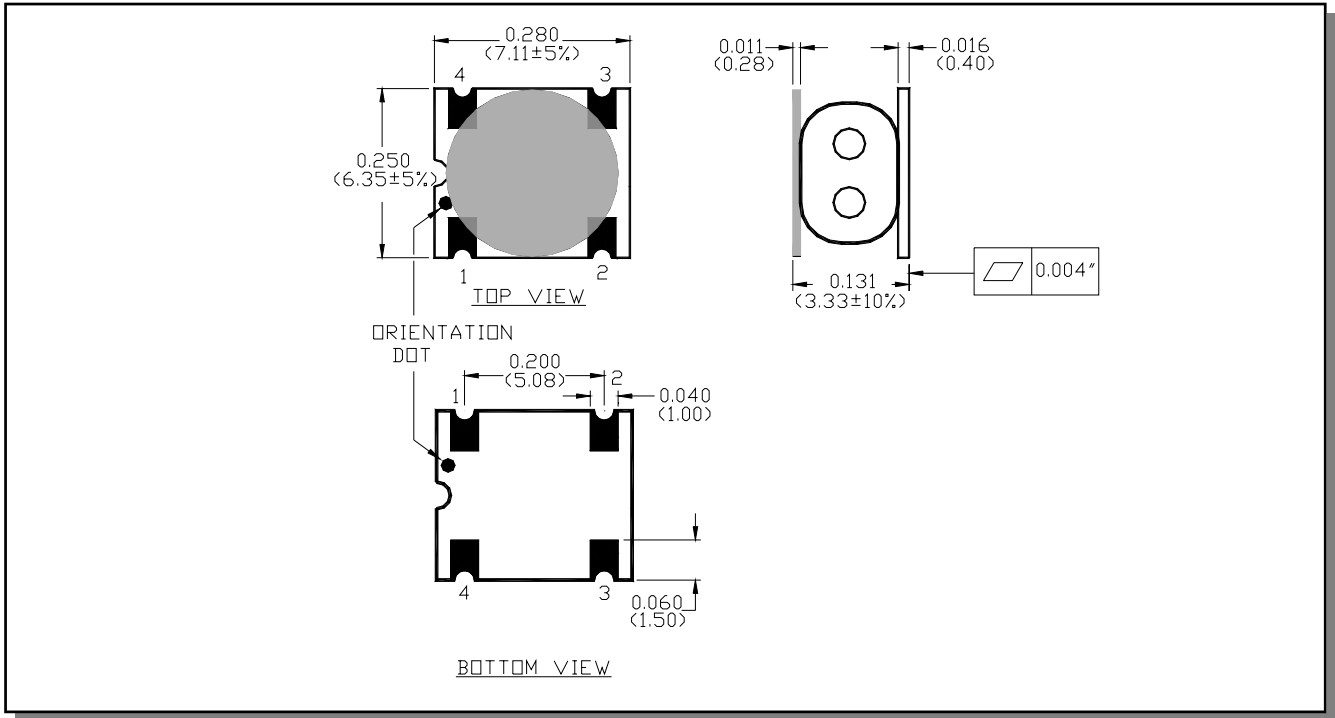
MABA-010441-CT38A0



Transformer, 1:3
5 MHz - 1200MHz

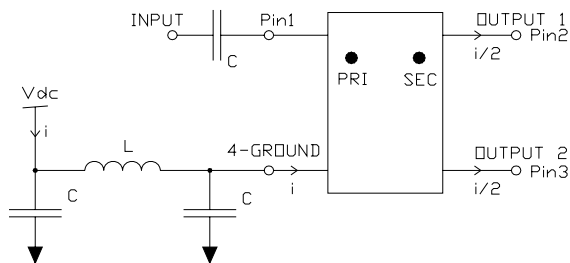
Rev. V1

Outline Drawing



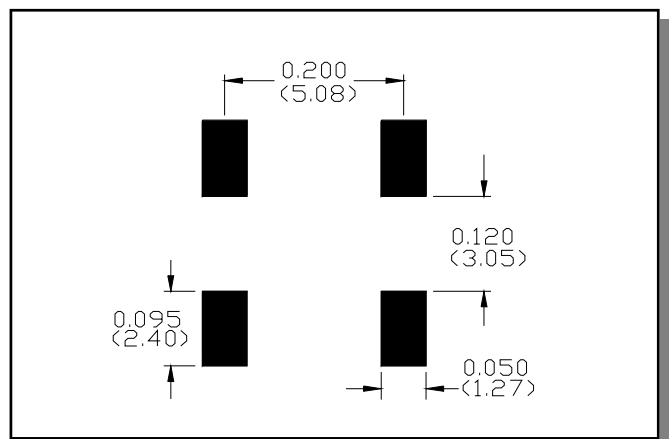
1. Dimensions in mm.
2. Tolerance: ±0.2mm unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Finish: ENIG

Recommended DC bias circuit



Cap/Ind	5-50MHz	50-1200MHz
C	100nF	10nF
L	10µH	1µH

Recommended Footprint



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Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	900
Reel size	mm	330
Tape width	mm	16.00
Pitch	mm	12.00
A ₀	mm	6.70
B ₀	mm	7.50
K ₀	mm	3.60
Orientation	-	F27

Ordering Information

Part Number	Description
MABA -010441-CT38A0	Tape & Reel
MABA -010441-CT38TB	Customer Evaluation Board

Recommended Maximum Ratings

Parameter	Units	Min	Max
Input Power	mW		250
DC Current	mA		200
Operating Temperature Range	°C	-40	+85
Storage Temperature Range	°C	-55	+125

Temperature data available on request

ECO History

Rev	Date	Description	ECN No.
V1	20 August 2010	Created datasheet	20101164

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