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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-011015

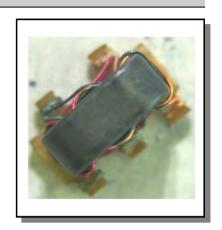


## 1:2.78 Transformer 45 - 1200 MHz

Rev. V2

#### **Features**

- 1:2.78 impedance ratio
- Surface mount
- Available on tape and reel
- 260°C reflow compatible
- RoHS Compliant, lead-free
- Excellent temperature stability
- Suitable for all CATV, Broadband and FTTx applications.



### **Electrical Specifications:** $Z_0 = 75\Omega$ , $T_A = 25$ °C, $P_{in} = 0$ dBm

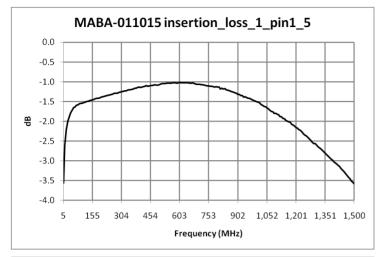
Parameter	Conditions	Units	Min	Тур	Max
Frequency Range		MHz	45		1200
Impedance		Ω		75	
Impedance Ratio				1:2.78	
Insertion Loss (Pin1 - Pin5)	45 - 200 MHz 200 - 600 MHz 600 - 1200MHz	dB dB dB	- - -	1.5 1.1 1.3	2.1 1.7 3.2
Insertion Loss (Pin1 - Pin3)	45 - 200 MHz 200 - 600 MHz 600 - 1200MHz	dB dB dB	- - -	1.7 1.8 2.3	2.3 2.4 3.7
Amplitude Balance	45 - 200 MHz 200 - 600 MHz 600 - 1200MHz	dB dB dB	- - -	0.3 0.8 1.1	±0.6 ±1.6 ±2.2
Phase Balance	45 - 200 MHz 200 - 600 MHz 600 - 1200MHz	0 0 0	- - -	5 12 18	±10 ±20 ±32
Input Return Loss (Pin1)	45 - 200 MHz 200 - 700 MHz 700 - 1200 MHz	dB dB dB	-11 -13 -12	14 17 19	- - -

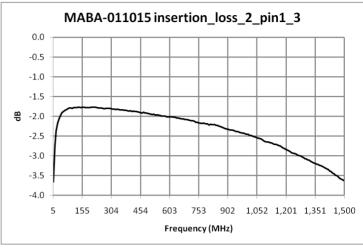
# MABA-011015

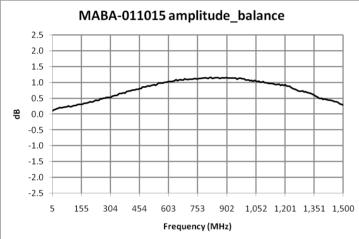


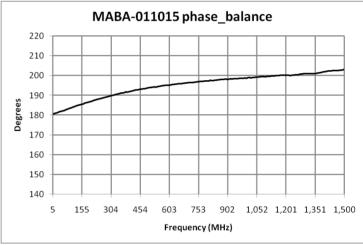
1:2.78 Transformer 45 - 1200 MHz

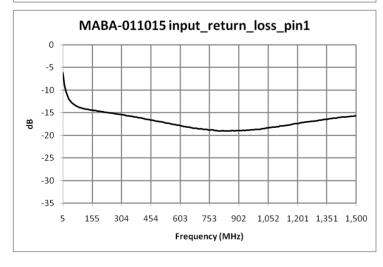
Rev. V2

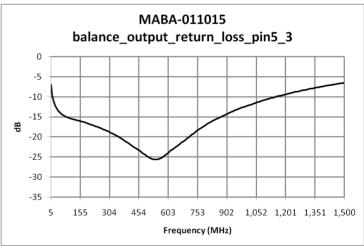












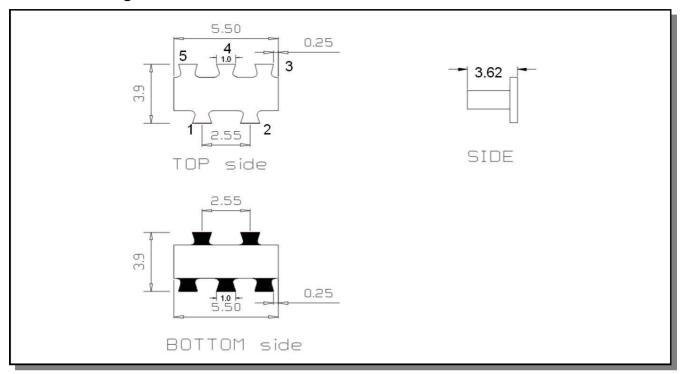
Electrical Specifications:  $Z_0$  = 75 $\Omega$ ,  $T_A$  = 25 $^{\circ}$ C,  $P_{in}$  = 0dBm



## 1:2.78 Transformer 45 - 1200 MHz

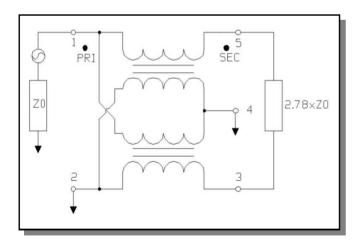
Rev. V2

#### **Outline Drawing**

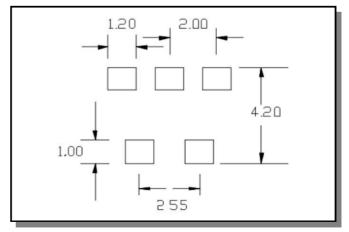


- Dimensions in mm.
- 2. Tolerance: ±0.2mm unless otherwise noted.
- 3. Model number and lot code are printed on the reel.
- 4. Plating finish: ENIG

#### Recommended DC bias circuit



#### **Recommended Footprint**





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#### **Tape & Reel Information**

Parameter	Units	Value
Qty per reel	-	2000
Reel Size	mm	330
Tape Width	mm	12.00
Pitch	mm	8.00
Ao	mm	4.10
Во	mm	5.80
Ko	mm	3.90
Orientation	-	F52
Reference Application Note ANI-019 for orientation		

### **Ordering Information**

Part Number	Description		
MABA-011015	Tape & Reel		
MABA-011015-TB	Customer Evaluation Board		

### **Recommended Maximum Ratings**

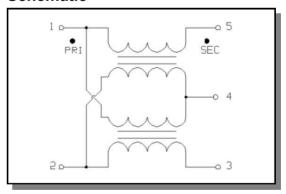
Parameter	Units	Min	Max
Input Power	mW		250
DC Current	mA		200
Operating Temperature Range	°C	-40	+85

Full temperature plots available on request

### **Pin Configuration**

Pin No.	Function	
1	Primary Dot	
2	Primary	
3	Secondary	
4	Centre Tap	
5	Secondary Dot	

#### **Schematic**



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