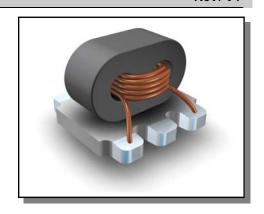


Transformer, 1:1.77 20 MHz - 1000 MHz

Rev. V1

#### **Features**

- ♦ 1:1.77 impedance ratio
- ♦ Surface mount
- Available on tape and reel
- ♦ 260°C reflow compatible
- ◆ RoHS Compliant and Pb free
- Excellent temperature stability
- $\bullet$  Can be used on 50Ω and 75Ω systems
- ♦ Suitable for all CATV, Broadband and FTTx applications.



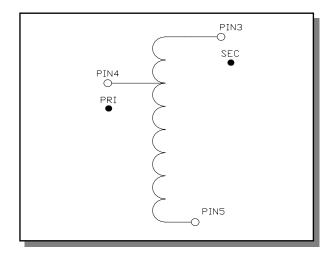
## **Electrical Specifications:** $Z_0 = 75\Omega$ , $T_A = 25$ °C, $P_{in} = 0$ dBm

Parameter	Conditions	Units	Min	Тур	Max
Frequency Range		MHz	20		1000
Impedance		Ω		75	
Impedance Ratio				1:1.77	
Insertion Loss (Pin 4 to 3)	20 - 500 MHz 500 -1000 MHz	dB dB	-	0.6 1.1	0.8 1.2
Input Return Loss (Pin 4)	20 - 150 MHz 150 - 500 MHz 500 - 1000 MHz	dB dB dB	20 12 8	22 13 9	- - -

## **Pin Configuration**

Pin No.	Function	
1	Not Connected (ground)	
2	Not Connected (ground)	
3	Secondary Dot	
4	Primary Dot	
5	Ground	

#### **Schematic**



ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology

**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.



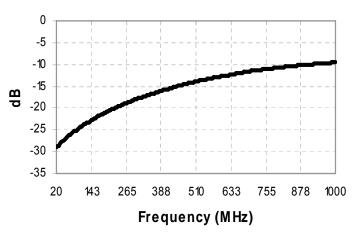
Transformer, 1:1.77 20 MHz - 1000 MHz

Rev. V1

### Insertion Loss: (Pin 4 to 3)

#### 0.0 -0.2 -0.4 -0.6 8.0--1.0 -1.2 878 20 143 265 388 633 755 1000 Frequency (MHz)

### **Return Loss: (Pin 4)**



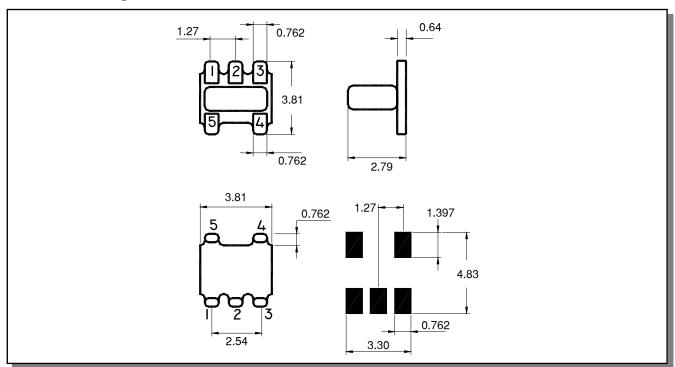
Electrical Specifications:  $Z_0$  = 75 $\Omega$ ,  $T_A$  = 25 $^{\circ}$ C,  $P_{in}$  = 0dBm



Transformer, 1:1.77 20 MHz - 1000 MHz

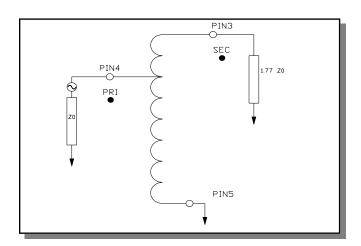
Rev. V1

### **Outline Drawing**

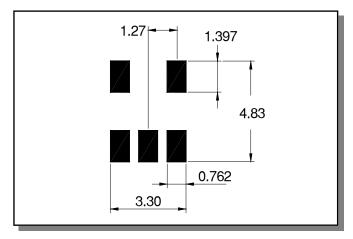


- 1. Dimensions in mm.
- 2. Tolerance: ±0.2mm unless otherwise noted.
- 3. Model number and lot code printed on reel.
- 4. Plating finish: ENIG

### **Application Circuit**



### **Recommended Footprint**





Transformer, 1:1.77 20 MHz - 1000 MHz

### **Tape & Reel Information**

Parameter	Units	Value
Qty per reel	-	2000
Reel size	mm	330
Tape width (W)	mm	12.0
Pitch (P <sub>1</sub> )	mm	8.0
A <sub>0</sub>	mm	4.0
B <sub>0</sub>	mm	4.0
K <sub>0</sub>	mm	2.9
Orientation	-	F5
Reference Application note ANI-019 for orientation		

### **Ordering Information**

Part Number	Description
MABA-010463-CA2A40	Tape & Reel

### **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	ECO
V1	4 Sep 2010	New Transformer release	20101283