

Features

- Surface mount
- 2:1 impedance
- CT on Secondary
- RoHS* Compliant
- 260°C reflow compatible.
- Available on Tape and Reel

Product Image



Description

M/A-COM's MABAES0040 is a 2:1 RF flux coupled transformer in a low cost, surface mount package. Ideally suited for high volume cellular and wireless applications. Typical applications include single to balanced mode conversion and impedance matching.

Ordering Information

Part Number	Package
MABA-009387-ES0040	2000 piece reel

Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 50\Omega$ ¹

Parameter	Test Conditions	Test Conditions	Units	Min	Typ	Max
RF Frequency	-	1 - 350	MHz	-	-	-
Insertion Loss	-	1 - 150	dB	-	0.7	1.0
		150 - 250	dB	-	1.6	2.0
		250 - 350	dB	-	2.6	3.0
Amplitude Unbalance	-	1 - 150	dB	-	0.3	0.5
		150 - 250	dB	-	0.7	1.0
		250 - 350	dB	-	1.5	2.0
Phase Unbalance	-	1 - 250	Degree	-	2.5	5.0
		250 - 350	Degrees	-	8.0	12.0

Pin Configuration

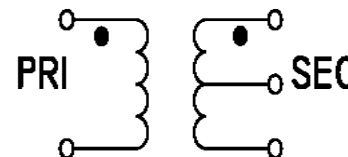
Pin No.	Function
1	Secondary Dot
2	Secondary CT
3	Secondary
4	Primary
5	Primary Dot

Absolute Maximum Ratings^{1,2}

Parameter	Absolute Maximum
DC Power	250 mW
DC Current	30 mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM does not recommend sustained operation near these survivability limits.

Schematic



This PRELIMINARY Data Sheet contains information regarding a product M/A-COM has under development. Performance is based on measured results and target specifications. Commitment to produce in volume is not guaranteed.

* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

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

• **North America** Tel: 800.366.2266 / Fax: 978.366.2266

• **Europe** Tel: 44.1908.574.200 / Fax: 44.1908.574.300

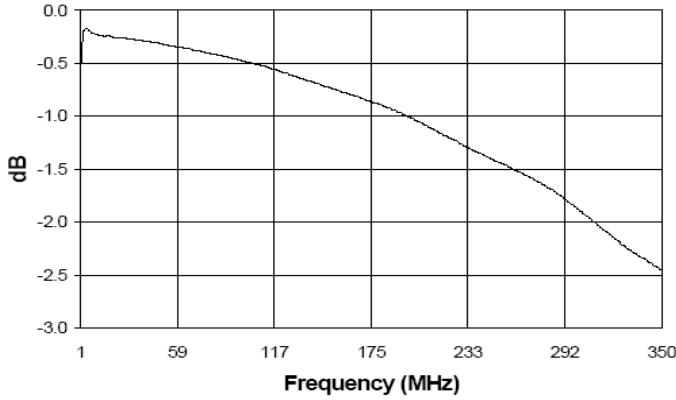
• **Asia/Pacific** Tel: 81.44.844.8296 / Fax: 81.44.844.8298

Visit www.macom.com for additional data sheets and product information.

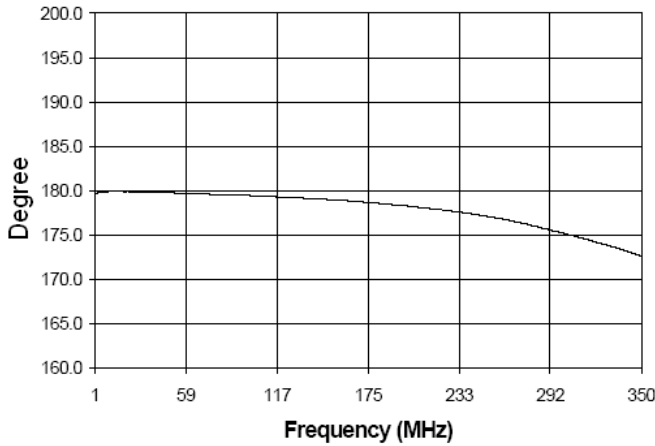
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Typical Performance Curves

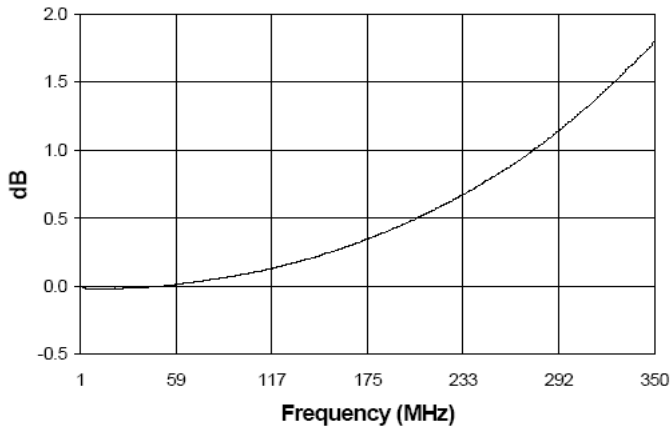
Insertion Loss



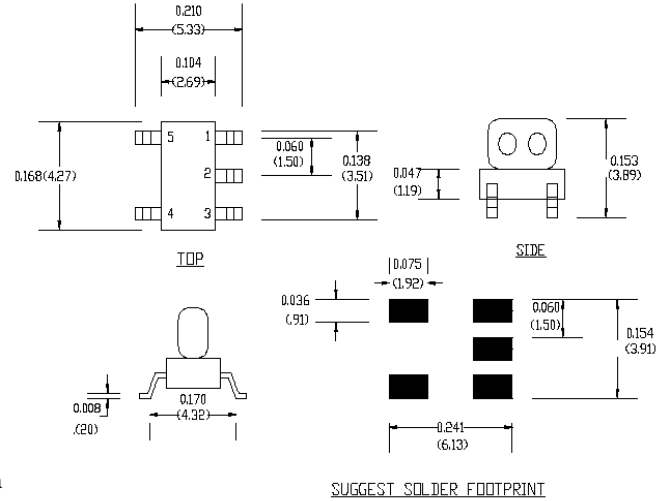
Phase Unbalance



Amplitude Unbalance



SM-138 package



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