

### Features

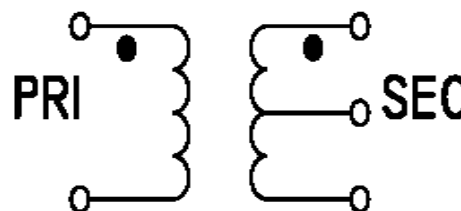
- Surface mount
- 2:1 impedance
- CT on Secondary
- RoHS\* Compliant
- 260°C reflow compatible.
- Available on Tape and Reel



### Description

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.

### Schematic



### Ordering Information

Part Number	Package
MABA-009387-ES0040	2000 piece reel

### Pin Configuration

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

\* Restrictions on Hazardous Substances, European Union Directive 2011/65/EU.

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

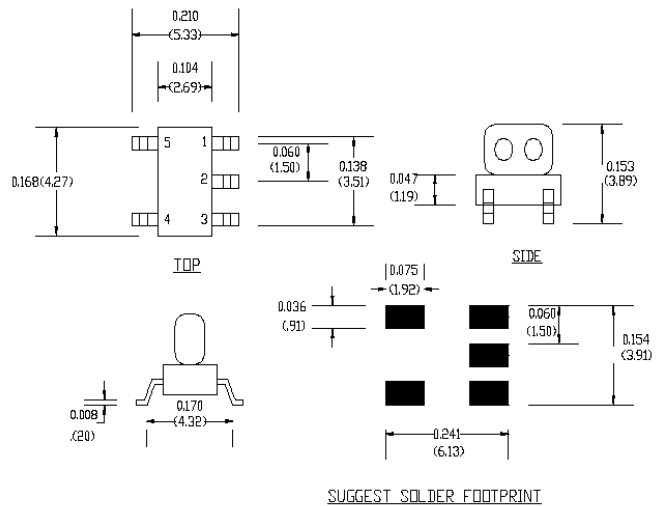
Parameter	Test Conditions	Units	Min	Typ	Max
RF Frequency	1 - 350	MHz	—	—	—
Insertion Loss	1 - 150	dB	—	0.7	1.0
	150 - 250			1.6	2.0
	250 - 350			2.6	3.0
Amplitude Unbalance	1 - 150	dB	—	0.3	0.5
	150 - 250			0.7	1.0
	250 - 350			1.5	2.0
Phase Unbalance	1 - 250	Degree	—	2.5	5.0
	250 - 350			8.0	12.0

**Absolute Maximum Ratings <sup>1,2</sup>**

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

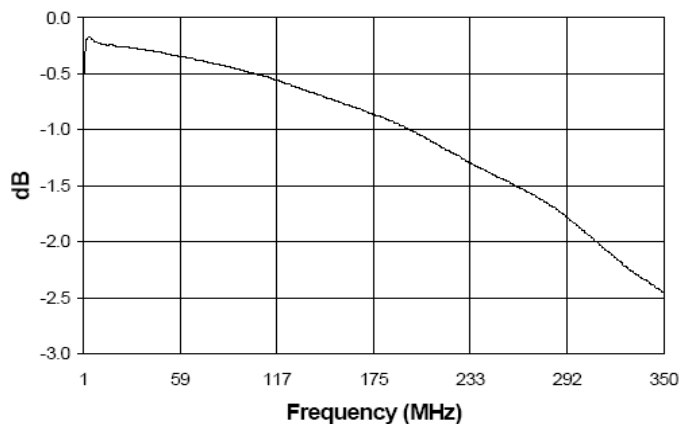
- Exceeding any one or combination of these limits may cause permanent damage to this device.
- MACOM does not recommend sustained operation near these survivability limits.

**SM-138 package**

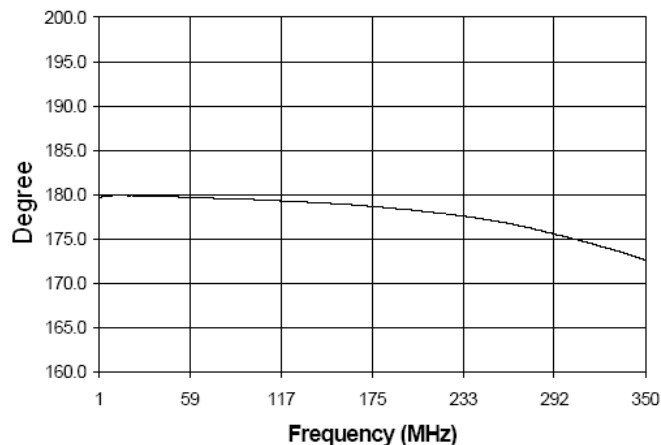


## Typical Performance Curves

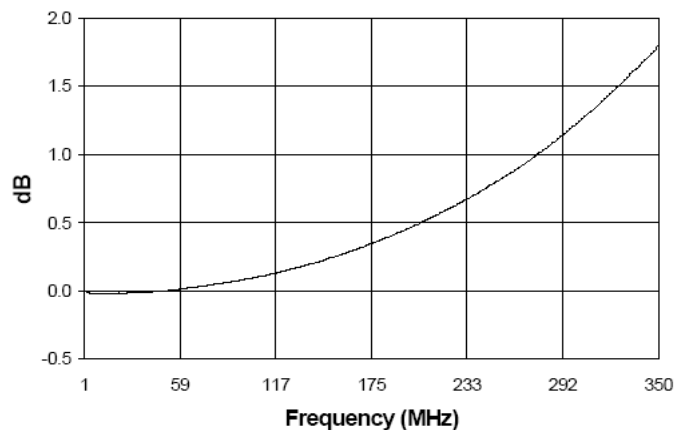
**Insertion Loss**



**Phase Unbalance**



**Amplitude Unbalance**



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