

## 1:8 Flux Coupled Transformer 2 - 500 MHz

Rev. V4

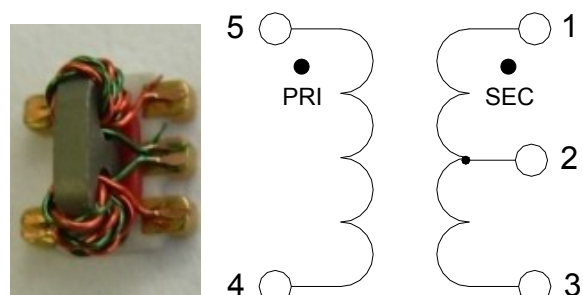
### Features

- Surface Mount Package
- 1:8 Impedance
- Wide Frequency Range
- RoHS Compliant, Lead Free
- Available on Tape and Reel

### Description

The MABA-010143-FLUX18 is a RoHS compliant 1:8 RF flux coupled transformer in a surface mount package. The windings are welded to the package substrate for improved reliability and to eliminate lead content. Ideally suited for high volume cellular and wireless application.

### Schematic



### Pin Configuration

Pin #	Function
1	Secondary Dot
2	Secondary CT
3	Secondary
4	Primary
5	Primary Dot

### Electrical Specifications: Freq. = 2 - 500 MHz, $T_A = 25^\circ\text{C}$ , $Z_0 = 50\ \Omega$ , $P_{IN} = 0\ \text{dBm}$

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Insertion Loss	—	dB	—	1.0	2.0
Amplitude Unbalance	—	dB	—	0.1	0.4
Phase Unbalance	—	°	—	0.2	0.8

### Ordering Information

Parameter	Package
MABA-010143-FLUX18	2000 piece reel

### Absolute Maximum Ratings

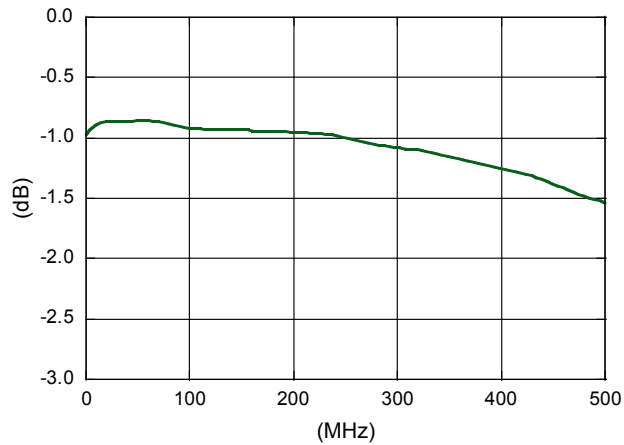
Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

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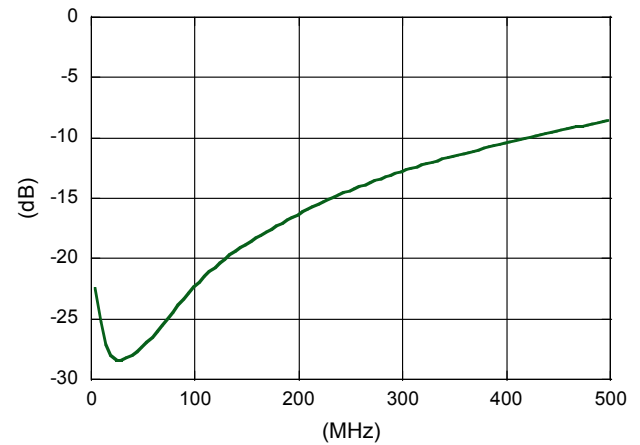
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Typical Performance:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 50\ \Omega$ ,  $P_{IN} = 0\ \text{dBm}$

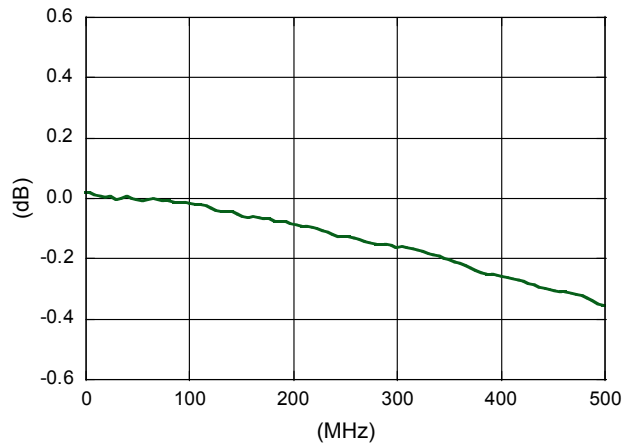
**Insertion Loss**



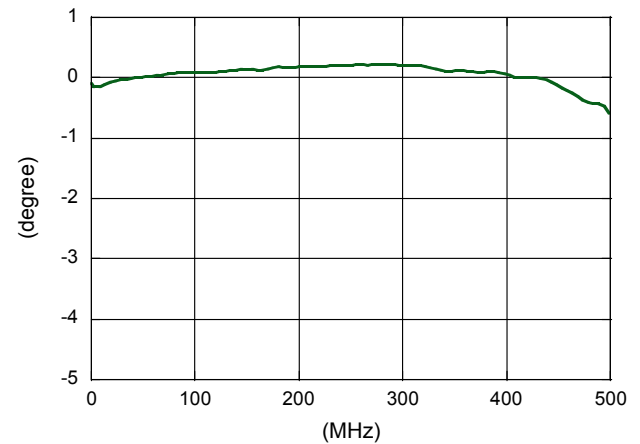
**Input Return Loss**



**Amplitude Unbalance**



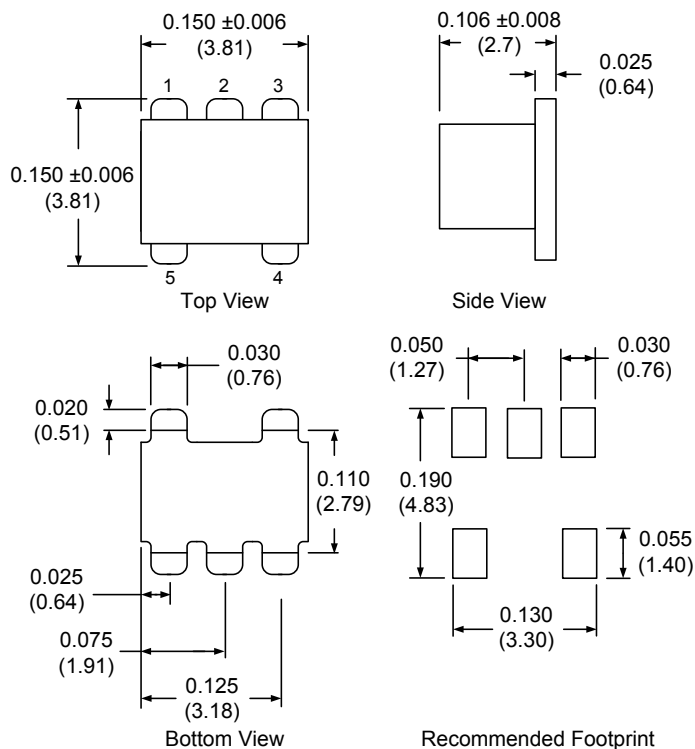
**Phase Unbalance**



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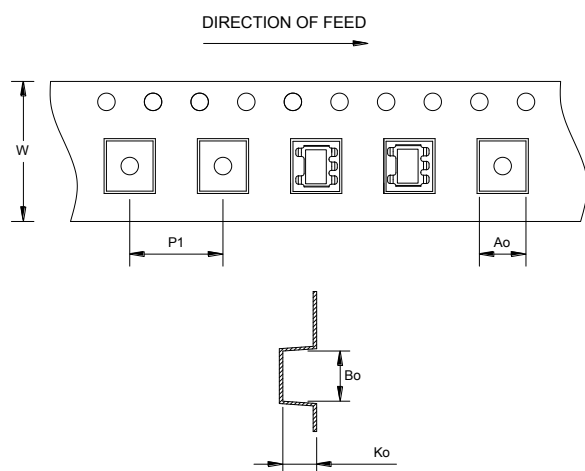
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### Case Style SM-22



Dimensions are inches (millimeters) ±0.015 (0.38) unless otherwise specified.  
Drawing not to scale.

### Tape & Reel Information



### Dimensions

Item	Dimension (mm)
A <sub>o</sub>	4.00 +/-0.1
B <sub>o</sub>	4.30 +/-0.1
K <sub>o</sub>	2.90 +/-0.1
W	12.00 +/-0.3
P1	8.00 +/-0.1

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