

# MABA-010143-FLUX18



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

Rev. V2

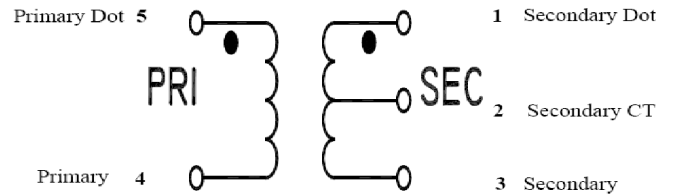
### Features

- Surface mount
- Wide frequency range
- 1:8 impedance
- Lead Free
- RoHS\* Compliant and is 260°C reflow compatible.
- Available on Tape and Reel, reel quantity 2000

### Description

M/A-COM's MABA-010143-FLUX18 is a RoHS compliant 1:8 RF flux coupled transformer in a low cost, surface mount package. The windings of the MABA-010143-FLUX18 are welded to the package substrate for improved reliability and to eliminate lead content. Ideally suited for high volume cellular and wireless application. Parts are packaged in tape & reel.

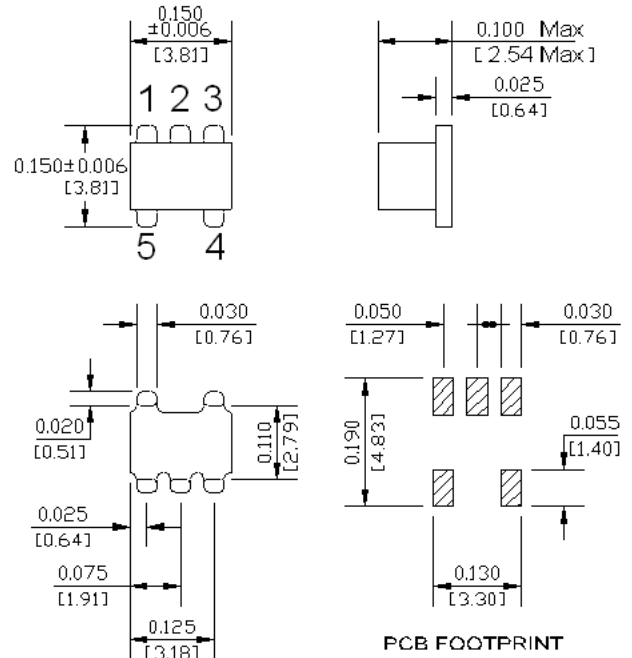
### Schematic



### Product Image



### SM-22 package



### Pin Configuration

Pin No.	Function
1	Secondary Dot
2	Not Connected
3	Secondary
4	Primary
5	Primary Dot

\* Dimensions are inches (millimeters) ±0.015 (0.38) unless otherwise specified.

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

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

Parameter	Test Conditions	Test Conditions	Units	Min	Typ	Max
RF Frequency	-	2 - 500	MHz	-	-	-
Insertion Loss	-	2 - 500	dB	-	1.0	2.0
Amplitude Unbalance	-	2 - 500	dB	-	0.1	0.4
Phase Unbalance	-	2 - 500	Degrees	-	0.2	0.8

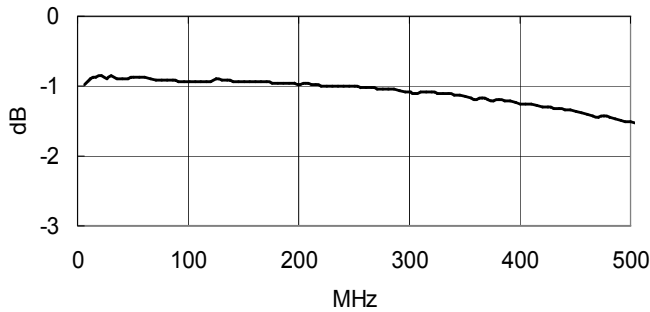
**Absolute Maximum Ratings <sup>1,2</sup>**

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

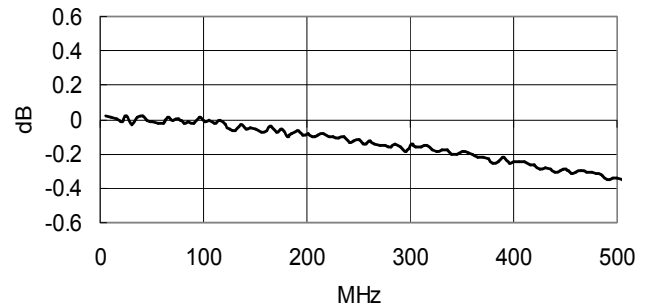
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM does not recommend sustained operation near these survivability limits.

## Typical Performance Curves

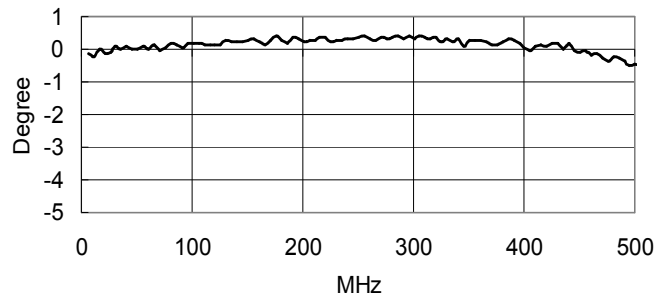
**Insertion Loss**



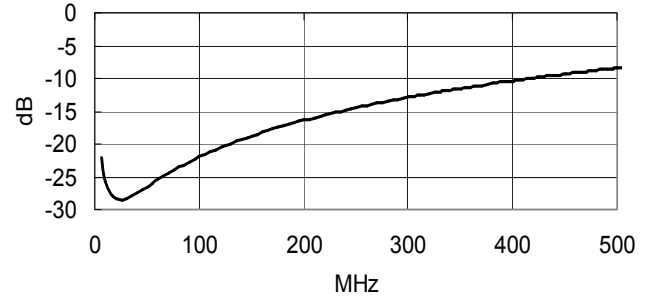
**Amplitude Unbalance**



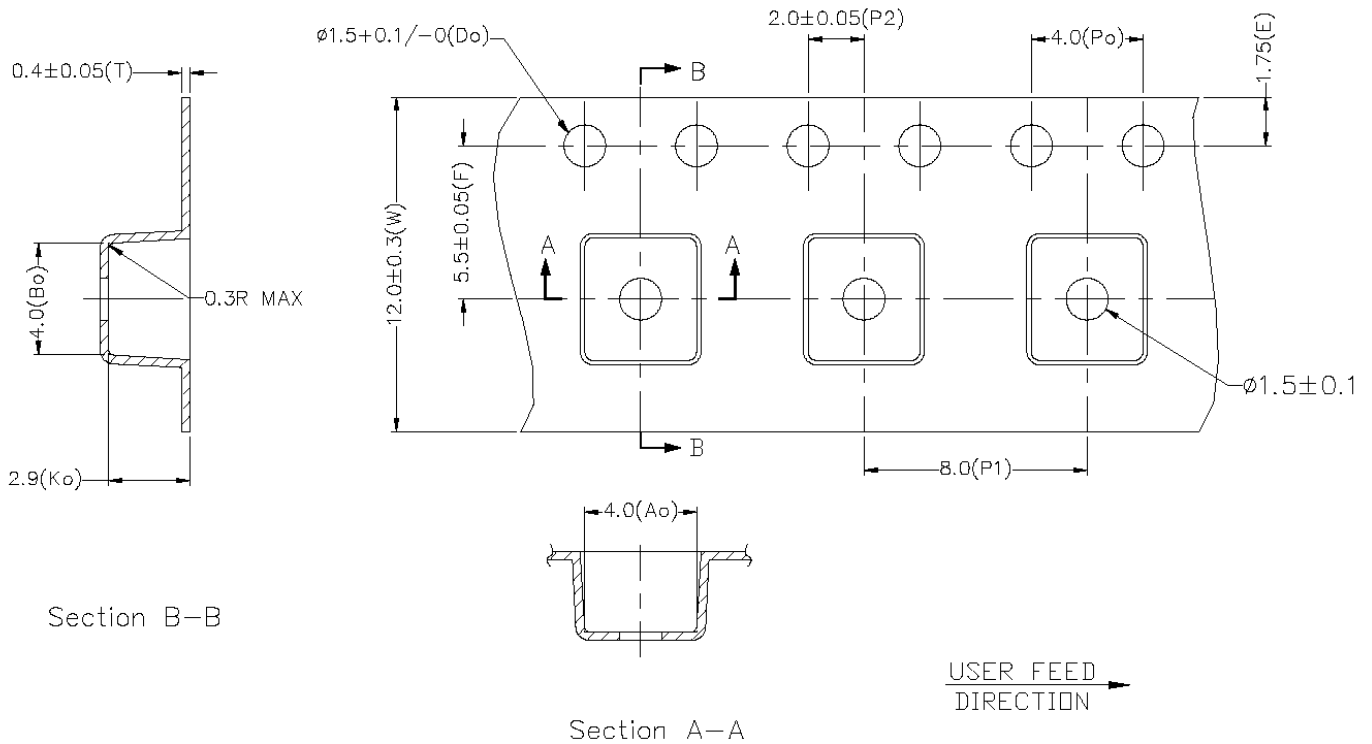
**Phase Unbalance**



**Input Return Loss**



### Tape & Reel Information



Item	Dimension
Ao	4.00mm +/-0.1mm
Bo	4.00mm +/-0.1mm
Ko	2.9mm +/-0.1mm
W	12.00mm +/-0.3mm
P1	8.00mm +/-0.1mm

### Ordering Information

Part Number	Package
MABA-010143-FLUX18	Tape and Reel (2000 piece Reel)