

E-Series 1:4 RF Flux Coupled Transformer 5.0-200 MHz

Rev. V3

Features

- 1:4 Impedance
- CT on Secondary
- Surface Mount
- Available on Tape and Reel.

Description

M/A-COM's MABACT0018 is a 1:4 RF flux coupled step-up transformer in a low cost, surface mount package. Ideally suited for high volume cellular & wireless applications. Typical applications include single to balance mode conversion and impedance matching.

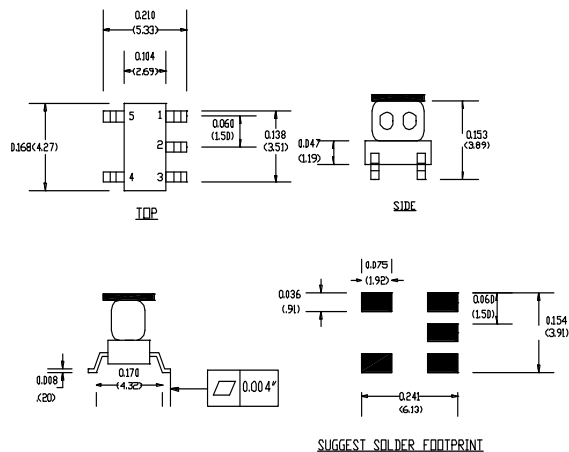
Product Image



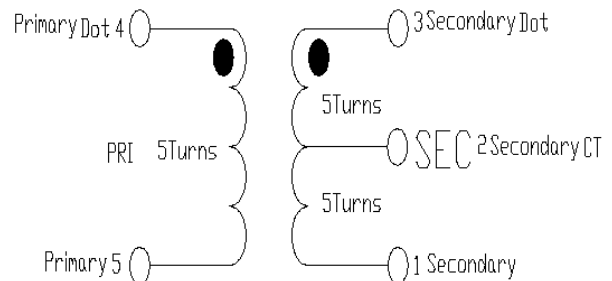
Ordering Information

Part Number	Package
MABACT0018	2000 piece reel

Case Style: SM-138-A



Schematic



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

Dimensions in inches [mm].
Tolerance where not specified: .xx ± .02, .xxx ± .010

Electrical Specifications: $T_A = 25^\circ\text{C}$

Parameter	Frequency (MHz)	Units	Typ	Min	Max
Frequency Range	5 - 65	-	-	-	-
	65 - 200	-	-	-	-
Insertion Loss	5 - 65	dB	0.4	-	0.7
	65 - 200	dB	0.9	-	1.5
Amp Balance	5 - 65	dB	0.02	-	0.1
	65 - 200	dB	0.20	-	0.5
Phase Balance	5 - 65	Deg	0.4	-	2.0
	65 - 200	Deg	2.0	-	8.0
Input Return Loss	5 - 65	dB	22.0	15.0	-
	65 - 200	dB	11.0	7.0	-

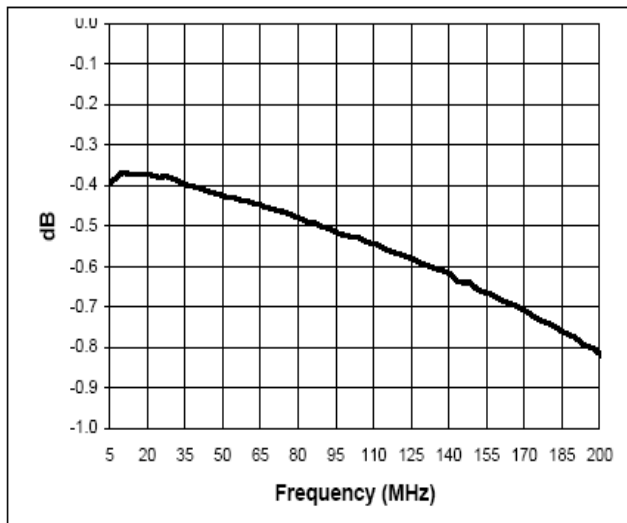
Absolute Maximum Ratings ^{1,2}

Parameter	Absolute Maximum
RF Power	50 mW
Peak IF Current	200 mA
Storage Temperature	-40° to +85° C
Operating Temperature	-40° to +85° C
Pin Temp. (10sec)	260°C

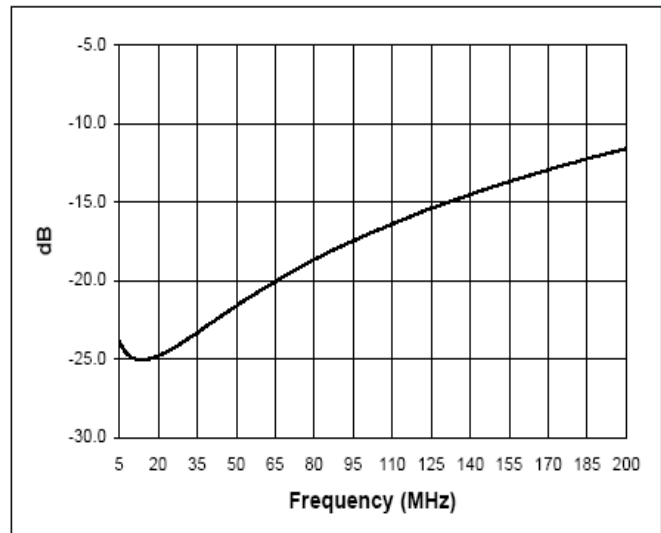
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM does not recommend sustained operation near these survivability limits.

Typical Performance Curves at +25°C

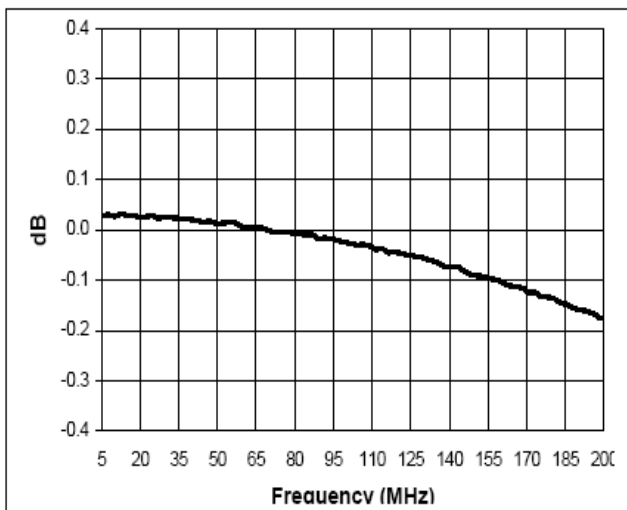
Insertion Loss



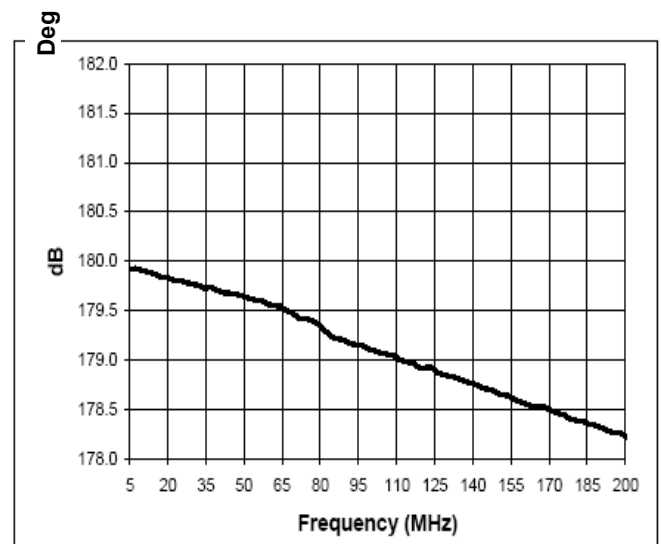
Input Return Loss



Amplitude Unbalance



Phase Unbalance



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