tyco Electronics

RoHS Compliant

MACOM

4:1 Transmission Line Transformer 500-3000MHz

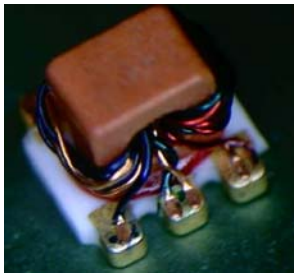
MABACT0065
V1P

Features

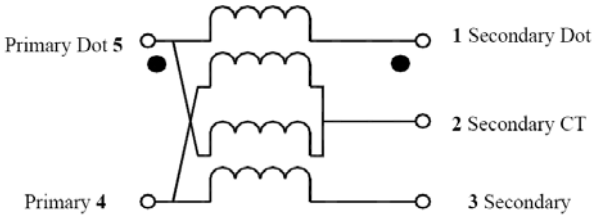
- Surface Mount
- 4:1 Impedance, unbalanced to unbalanced
- Centre tap on secondary
- 260°C Reflow Compatible
- RoHS* Compliant
- RoHS version of ETC1.6-4-2-3
- Available on Tape and Reel. Reel quantity 2000

Description

M/A-COM's MABACT0065 is a 4:1 RF transmission line step-up 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.



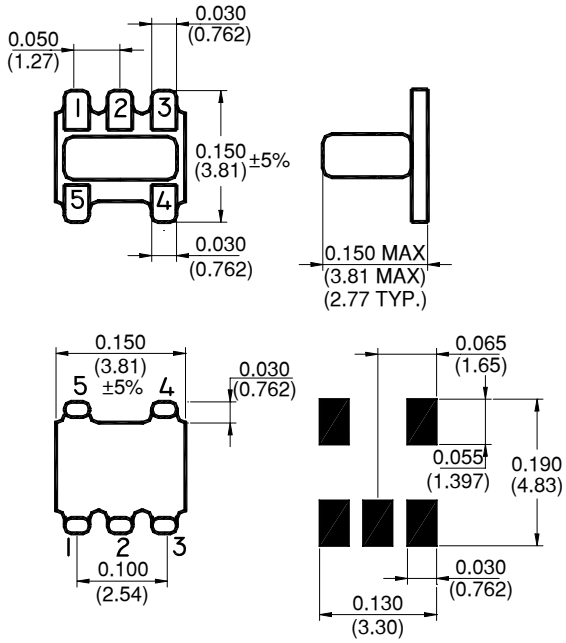
Schematic



Pin Configuration

Pin No.	Function
1	Secondary Dot (output 1)
2	Secondary centre tap (ground)
3	Secondary (output 2)
4	Primary (ground)
5	Primary Dot (input)

Case Style: SM-22



Dimensions in inches [mm] Tolerance: .xx ± .02, .xxx ± .010

Ordering Information

Part Number	Package
MABACT0065TR	2000 piece reel
MABA-007949-CT65TB	Customer test board

Note: Reference Application Note **M513** for reel size information.

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

- **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.

Electrical Specifications: T_A = 25°C, Z_0 = 50Ω [1]

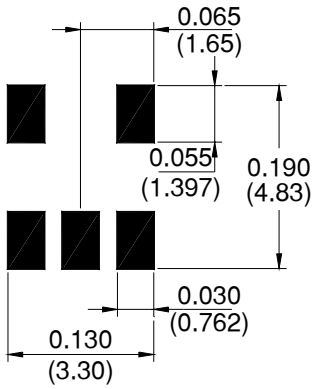
Parameter	Units	Nominal	Maximum	Mean (x)	Sigma (σ)
Frequency Range 500 - 3000	MHz	—	—	—	—
Insertion Loss (f_L - f_U) 500 - 750 MHz 750 - 1200 MHz 1200 - 3000 MHz	 dB dB dB	 — — —	 3.0 1.0 3.0	 — 0.22 —	 — 0.159 —

Absolute Maximum Ratings [1,2]

Parameter	Absolute Maximum
Max Input Power	250mW
DC current	30mA
Operating Temperature	-30°C to +85°C
Storage Temperature	-30°C to +85°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.

Recommended PCB Configuration



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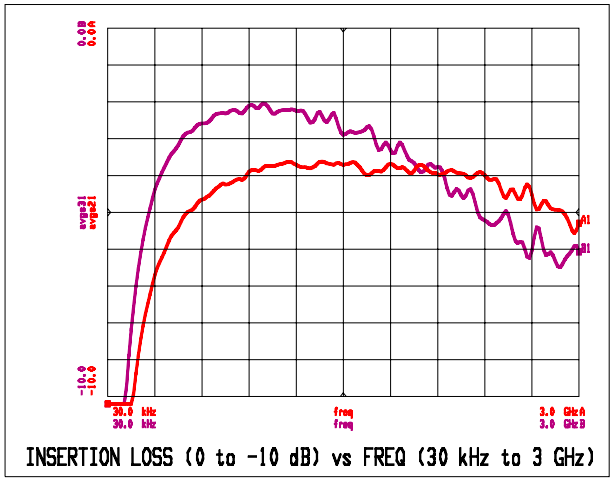
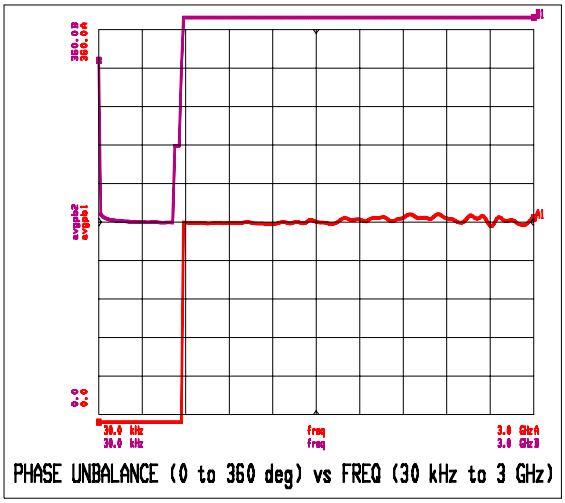
Typical Performance Curves: T_A = 25°C, Z_0 = 50Ω [1]

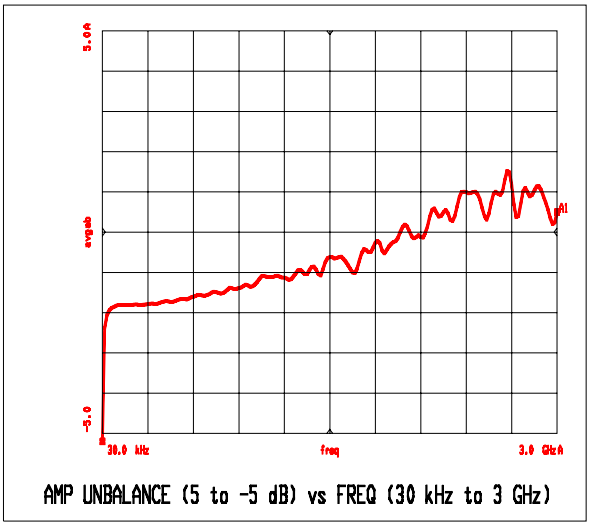
Insertion Loss



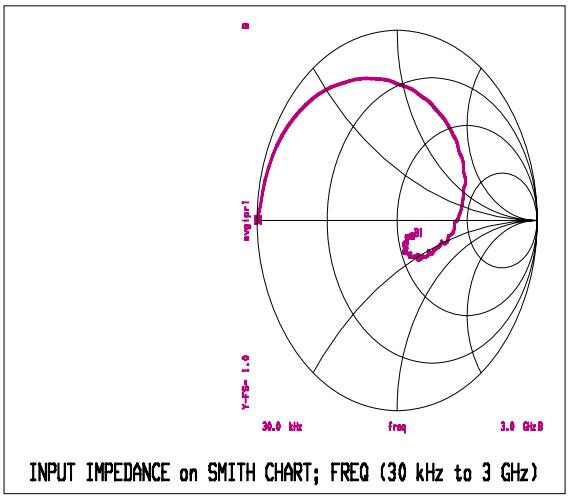
Phase Unbalance



Amplitude Unbalance



Input Impedance



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