

E-Series RF 1:4 Transmission Line Step-up Transformer 500 — 3000 MHz

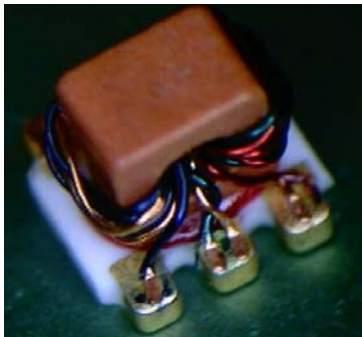
Rev. V6

Features

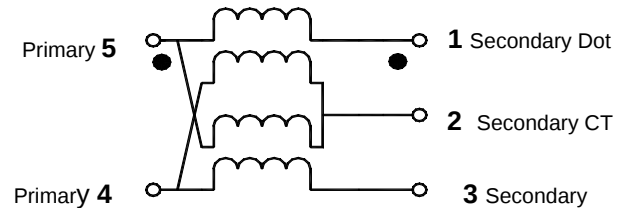
- Surface mount
- Wide frequency range
- 1:4 Impedance Ratio
- CT on Secondary
- Pb Free
- RoHS* version of ETC1.6-4-2-3
- 260°C reflow compatible.

Description

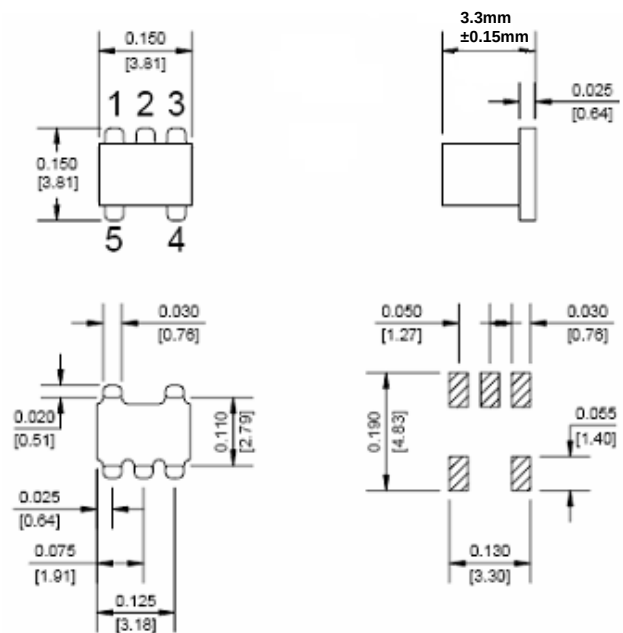
M/A-COM Technology Solutions MABA-007236-C16423 is a RoHS compliant 1:4 RF transmission line step-up transformer in a low cost, surface mount package. Ideally suited for high volume cellular and wireless applications. Typical applications include single to balanced mode conversion and impedance matching. Parts are packaged in tape & reel.



Schematic



Case Style



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

Pin Configuration

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

Recommended Maximum Ratings ^{1,2}

Parameter	Value
DC Power	250 mW
DC Current	50 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 Technology Solutions does not recommend sustained operation near these survivability limits.

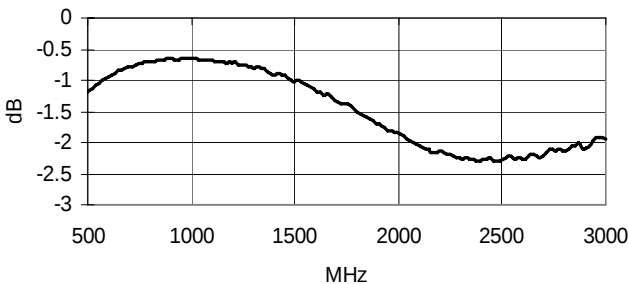
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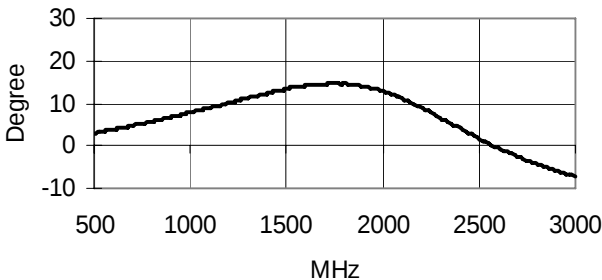
Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 50\Omega$ ¹

Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
RF Frequency	—	500 - 3000	MHz	—	—	—
Insertion Loss	$F_L - f_U$	500 - 700	dB	—	—	2.0
		700 - 1200	dB	—	—	1.0
		1200 - 3000	dB	—	—	3.0

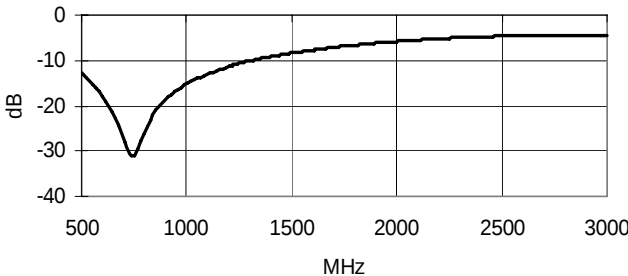
Insertion Loss



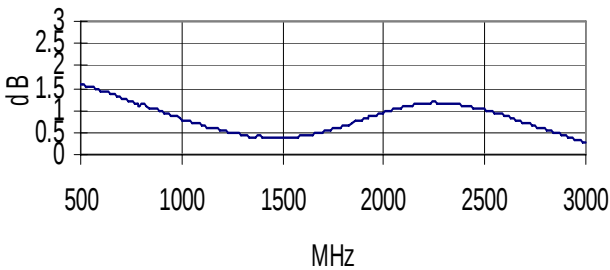
Phase Unbalance



Input Return Loss



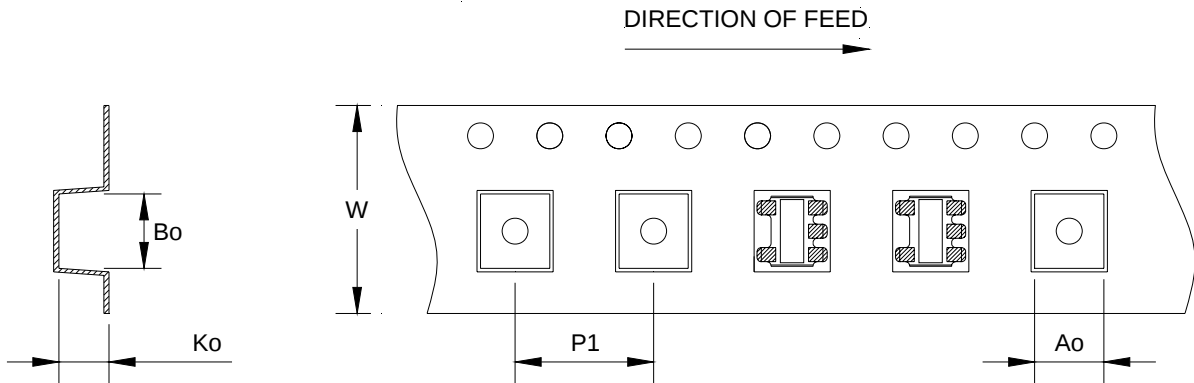
Amplitude Unbalance



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Tape & Reel Information



Item	Dimension
Ao	4.10mm +/- 0.1mm
Bo	4.20mm +/- 0.1mm
Ko	3.40mm +/- 0.1mm
W	12.00mm +/- 0.3mm
P1	8.00mm +/- 0.1mm

Ordering Information

Part number	Description
MABA-007236-C16423	2000 piece reel