

E-Series RF 1:4 Transmission Line Step-up Transformer 6 -1000 MHz

MABA-008639-TC41T7
V1

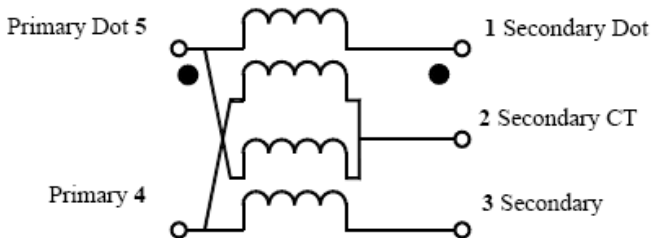
Features

- Surface mount
- 1:4 Impedance Ratio
- RoHS* Compliant and is 260°C reflow compatible.
- Available on Tape and Reel, reel quantity 2000

Description

M/A-COM's MABA-008639-TC41T7 is a RoHS compliant 1:4 RF transformer in a low cost, surface mount package. MABA-008639-TC41T7 is a wire welded RoHS version of ETC4-1T-7. Ideally suited for high volume cellular and wireless applications. Typical applications include single to balanced mode conversion and impedance matching.

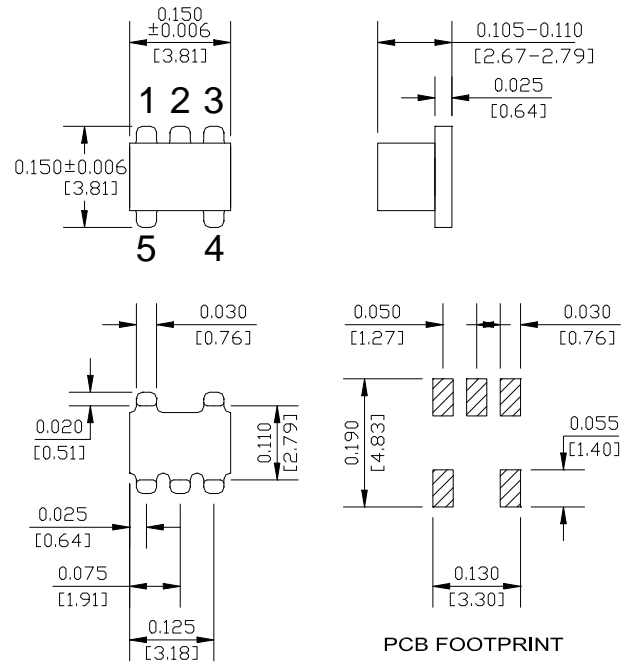
Schematic



Pin Configuration

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

SM-22 package



Ordering Information

Part Number	Package
MABA-008639-TC41T7	2000 piece reel

Note: Reference Application Note M513 for reel size information.

Absolute Maximum Ratings ^{1,2}

Parameter	Absolute Maximum
RF Power	250 mW
DC Current	30 mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°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.

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

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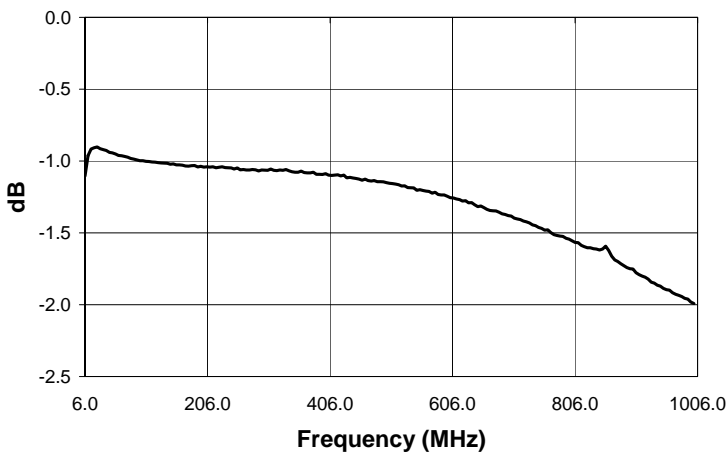
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Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 50\Omega$ ¹

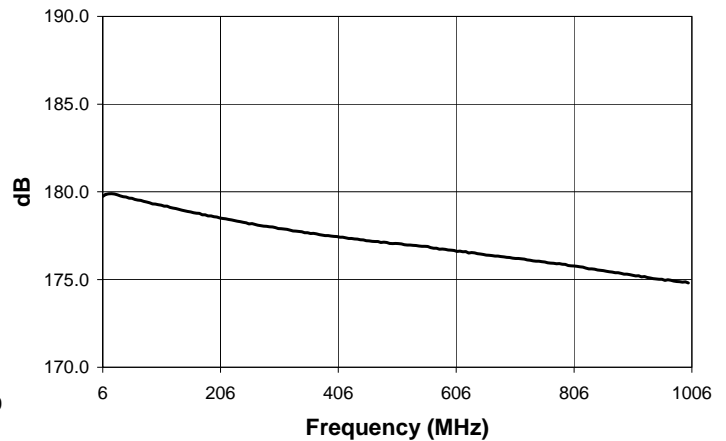
Parameter	Test Conditions	Frequency	Units	Min	Typ	Max
RF Frequency	—	6 - 1000	MHz	—	—	—
Insertion Loss	$F_L - f_U$	6 - 600	dB	—	—	2.0
		600 - 1000		—	—	3.0
Amplitude Unbalance	$F_L - f_U$	6 - 1000	dB	—	—	1.0
Phase Unbalance	$F_L - f_U$	6 - 1000	Degrees	—	—	10

Typical Performance Curves

Insertion Loss



Phase Unbalance



Amplitude Unbalance

