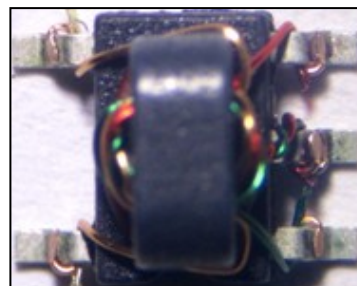


Features

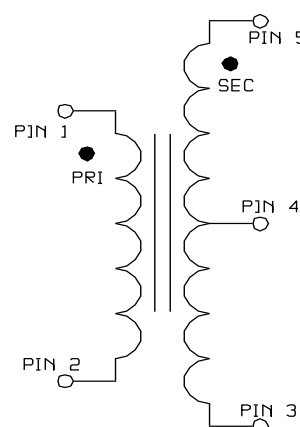
- Surface mount
- 1:2.56 Impedance ratio
- 260°C Reflow Compatible
- RoHS compliant and Pb free
- Available on tape and reel

Description

MABA-007902-CF38A0 is a 1:2.56 RF flux coupled step up transformer in a low cost surface mount package. Ideally suited for CATV Broadband applications.



Functional Schematic



Ordering Information

Part Number	Package
MABA-007902-CF38A0	Tape & Reel
MABA-007902-CF38TB	Customer test board

Pin Configuration

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

1:2.56 Impedance Ratio, Centre Tapped Transformer 5 - 300 MHz

Rev. V2

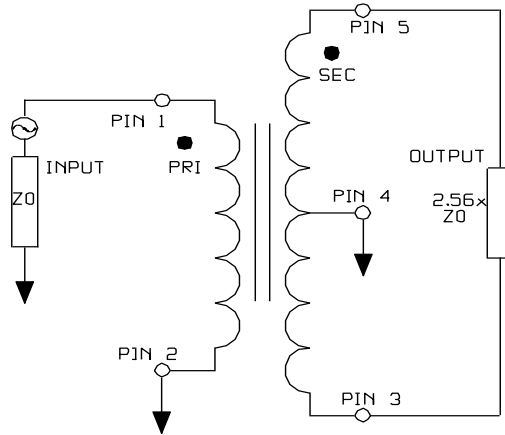
Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75 \Omega$, $P_{IN} = 0 \text{ dBm}$

Parameter	Conditions	Units	Min	Typ	Max
Frequency Range	—	MHz	5	—	300
Impedance	—	Ω	—	75	—
Impedance Ratio	—	—	—	1:2.56	—
Insertion Loss (Pin1 - Pin3)	5 - 85 MHz	dB	—	0.5	0.9
	85 - 300 MHz			0.5	1.0
Insertion Loss (Pin1 - Pin5)	5 - 85 MHz	dB	—	0.5	0.9
	85 - 300 MHz			0.7	1.0
Amplitude Balance	5 - 85 MHz	dB	—	0.03	0.1
	85 - 300 MHz			0.2	0.5
Phase Balance	5 - 85 MHz	°	—	0.07	1.0
	85 - 300 MHz			0.3	4.0
Input Return Loss (Pin1)	5 - 85 MHz	dB	19	25	—
	85 - 300 MHz		20	24	

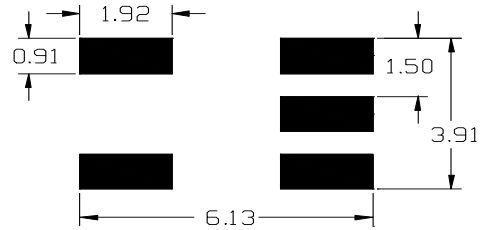
Recommended Maximum Ratings

Parameter	Rating
Input RF Power	500 mW
DC Current	500 mA
Operating Temperature Range	-40°C to +85°C

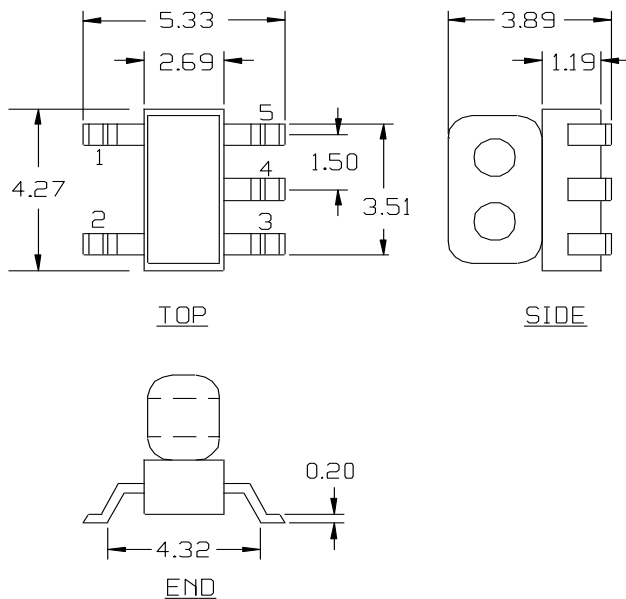
Application Circuit



PCB Layout



Outline Drawing

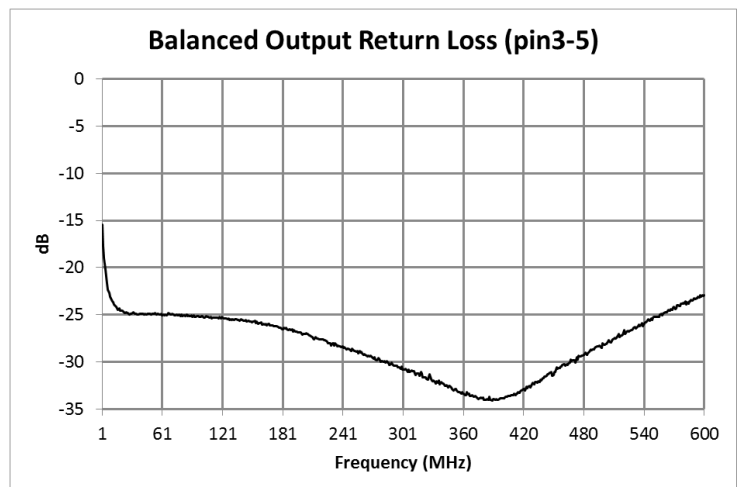
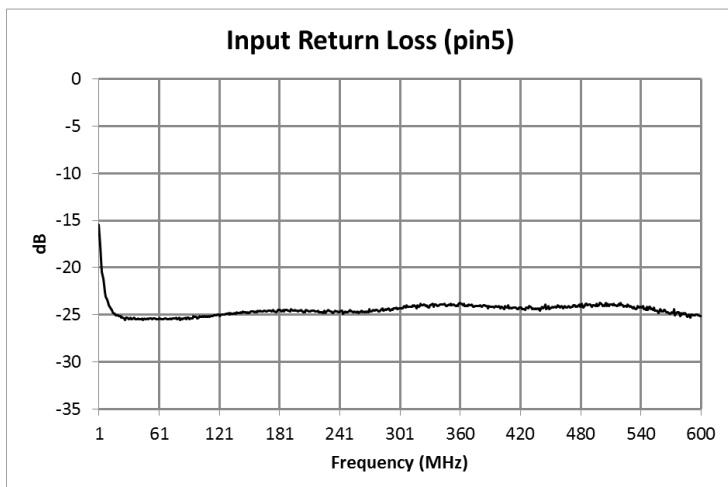
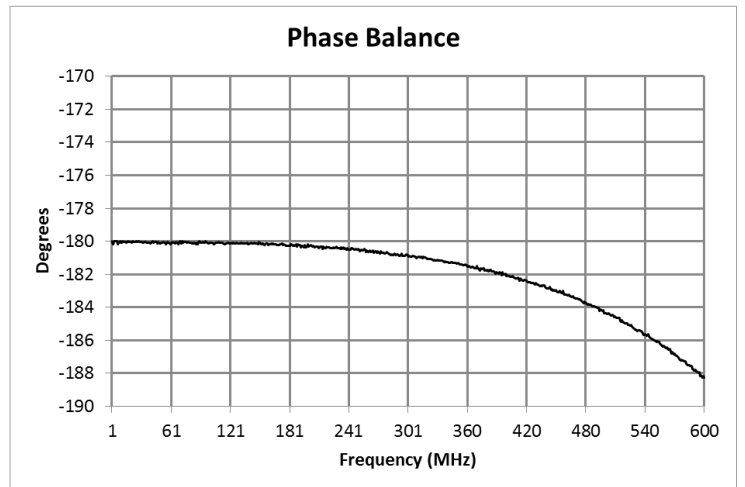
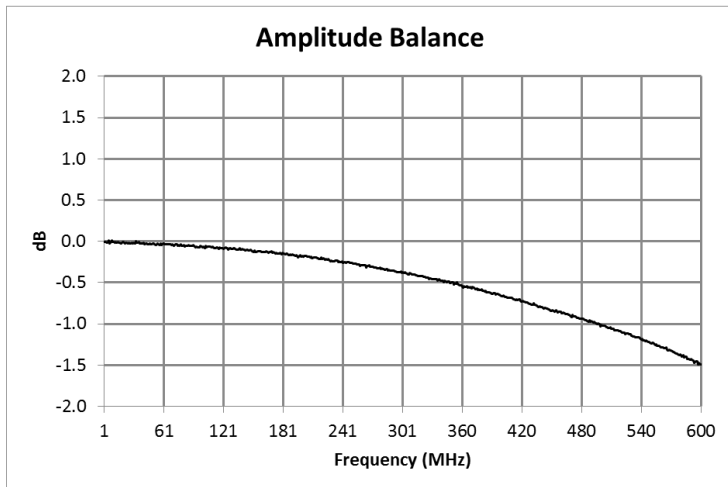
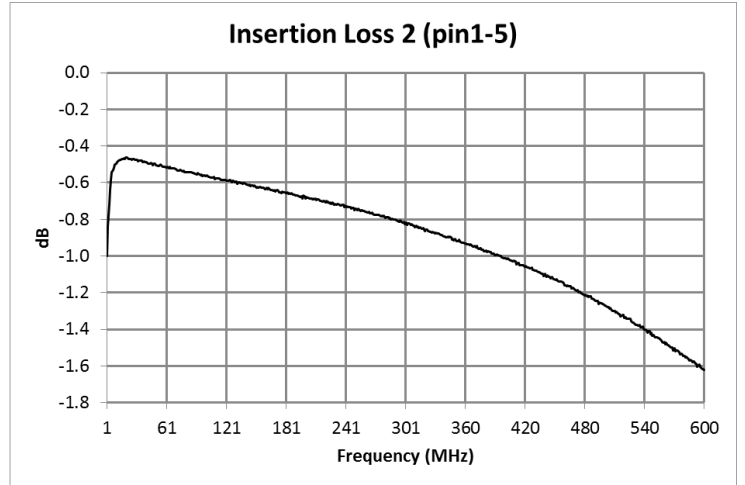
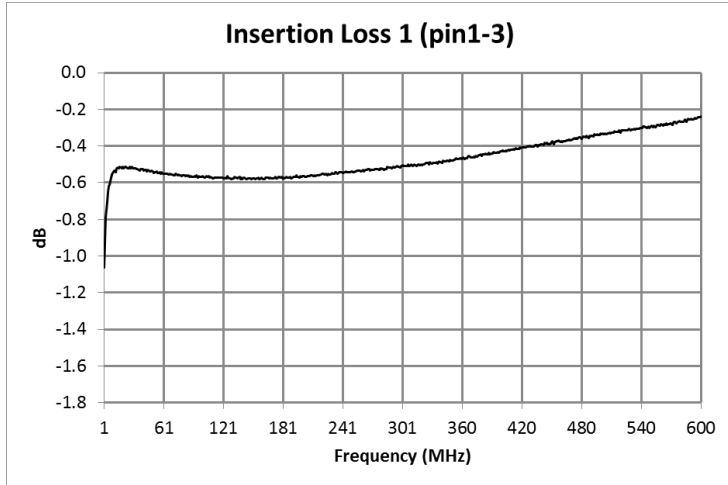


Tape & Reel Information

Parameter	Units	Value
Qty per reel	-	2000
Reel size	mm	330
Tape width (W)	mm	12.00
Pitch (P ₁)	mm	8.00
A ₀	mm	6.1
B ₀	mm	4.6
K ₀	mm	4.0
Orientation	-	F26
Reference Application note ANI-019 for orientation		

1. Dimensions in mm.
2. Tolerance: ±0.2mm unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Lead plating (CuSn6)

Typical Performance Curves



4 Full temperature plots available on request

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