

MBL0105T1

50Ω 0.4 to 500MHz 1:1

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Application

1. Impedance matching
2. Balanced amplifier
3. Balun
4. Cellular and VHF

Features

1. Excellent amplitude unbalance
2. Good return loss
3. Operating temperature range: -40~+85°C
4. 50Ω Impedance

Description

The MBL0105T1 is a coil balun by surface mount package. The MBL0105T1 is ideal for balanced amplifier and impedance matching. This composites which possess excellent electrical and mechanical stability. All components are 100% RF tested.

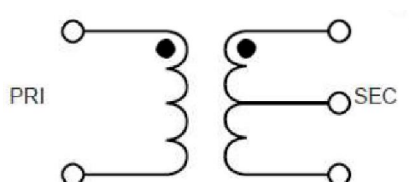


Characteristics

Item	Min.	Type.@25°C	Max.	Unit
Frequency Range	0.4		500	MHz
Insertion Loss1		1.5		dB
Insertion Loss2		0.5		dB
Phase Unbalance		5	20	degrees
Amplitude		0.5	2	dB
VSWR (:1)		1.5		:1
Operating Temp.	-40		+85	°C
Power			27	dBm

1) All the above data are based on specified demo board and tested in 25° environment.

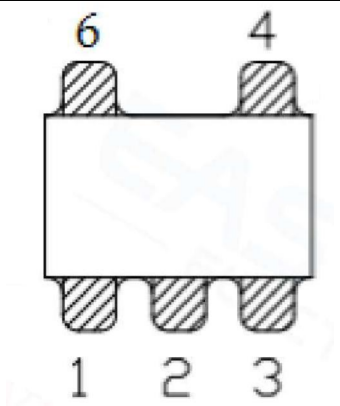
Port Configuration



All Use For RF & Microwave

MBL0105T1

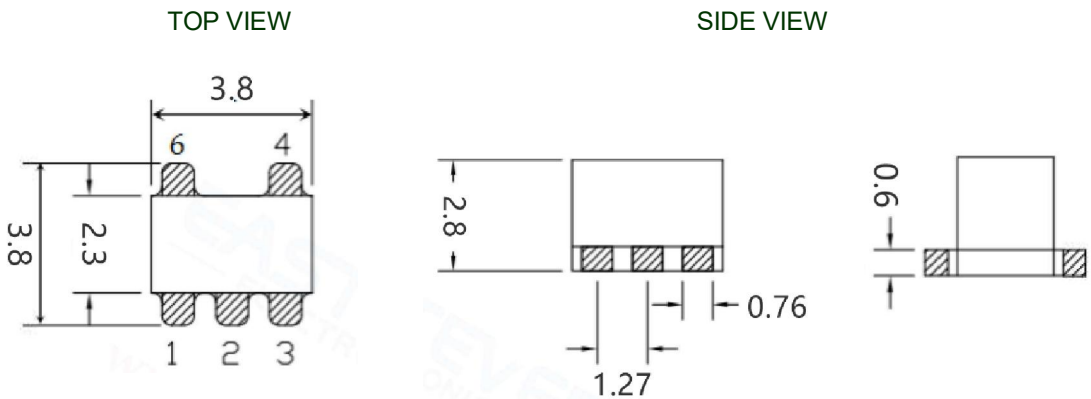
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MBL0105C1 Port Configurations

Pin No.	Function
1	Secondary (Output2)
2	Centre Tap (Ground)
3	Secondary Dot (Output1)
4	Primary Dot (Input)
6	Primary (Ground)

Outline Drawing



Unit: mm ±0.15mm

Typical Performance

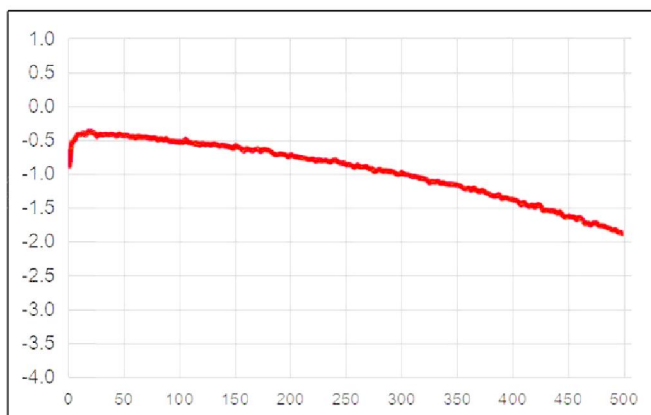
MBL0105T1 Main Line Loss (Out1)

MBL0105T1 Main Line Loss (Out2)

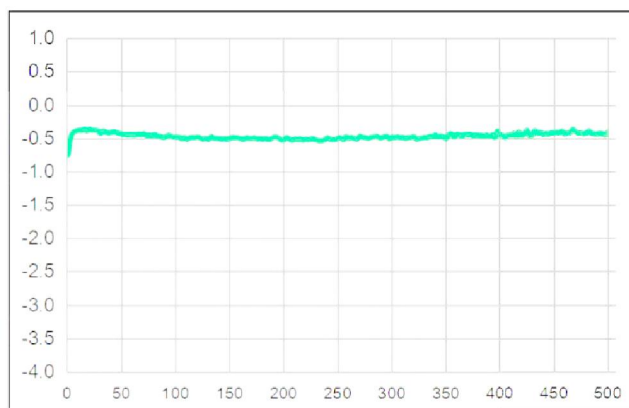
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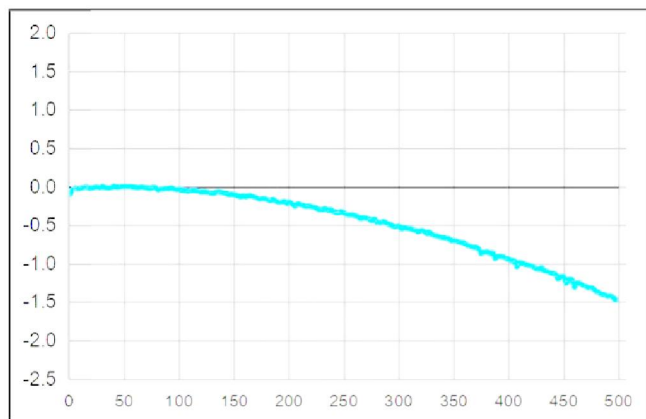
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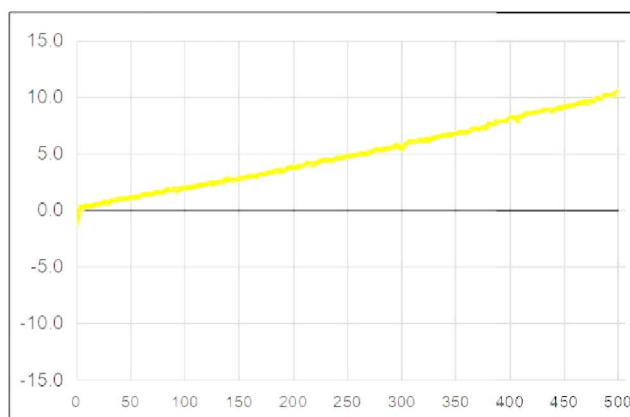
MBL0105T1 Amplitude Unbalanced



MBL0105T1 Phase Unbalanced



MBL0105T1 Input Return Loss



Recommended PCB Layout

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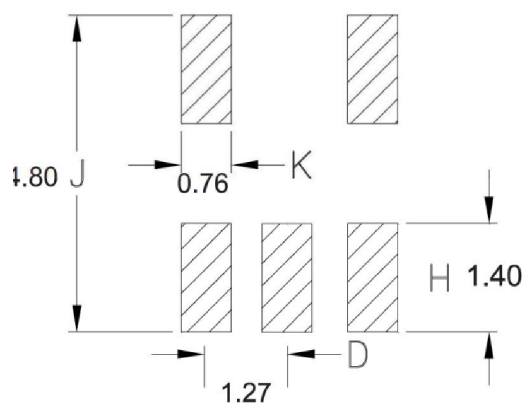
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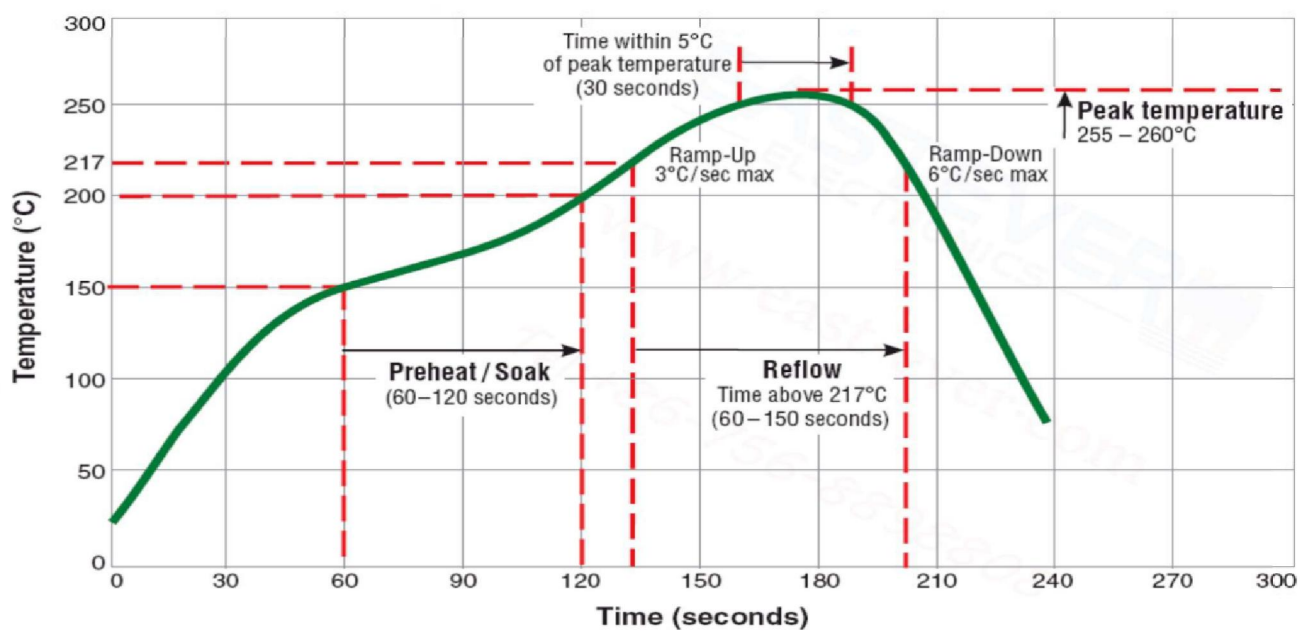
MBL0105T1

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REFLOW PROFILE



Packaging and Ordering Information

Device	Package	Reel	Shipping
MBL0105T1	3.8*3.8	7"	500/Reel

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Revision	Description	Date
Rev0	Preliminary	2020/3/29
Rev1	Update	2022/6/9
Rev1	Update	2023/9/22

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