

LTCC BALUN (低温共烧陶瓷 巴伦变压器)

RF Transformer (射频变压器)

HG-B2012-4000-5500-2+

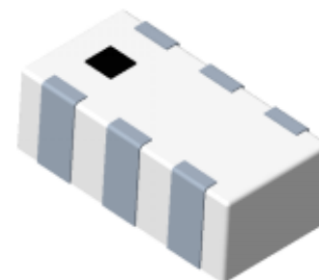
50Ω 4000 to 5500 MHz 1:2 Ratio

FEATURES

- Wideband, 4000 to 5500 MHz (带宽)
- Small size (小体积)
- Low phase unbalance, 10 deg. and Amplitude unbalance, 0.6 dB max.
(相位不平衡度 $\leq 10^\circ$, 振幅不平衡度 $\leq 0.6\text{dB}$)
- Temperature stable (温度稳定)
- LTCC construction (低温共烧陶瓷工艺)

APPLICATIONS

- WCDMA
- WLAN
- WIMAX/WIBRO
- MMDS
- RADAR



Product Schematic Diagram

产品示意图

ELECTRICAL SPECIFICATIONS AT 25°C (室温条件下测试参数)

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Units
Impedance Ratio(阻抗比)		50Ω/50Ω/50Ω			1:2
Frequency Range(频率范围)		4000		5500	MHz
Insertion Loss Above 3dB(插入损耗)	4000 - 5500	—	—	1.6	dB
Amplitude Unbalance(振幅不平衡度)	4000 - 5500	—	—	0.6	dB
Phase Unbalance (Relative to 180°)(相位不平衡度)	4000 - 5500	—	—	10	Degree
Return Loss(回波损耗)	4000 - 5500	10	—	—	dB

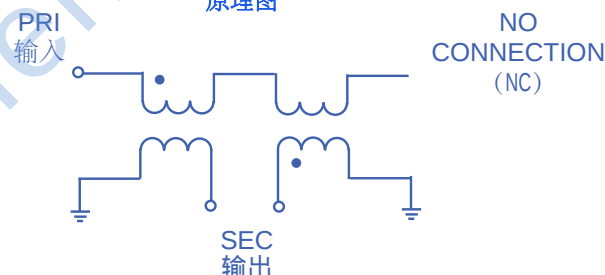
MAXIMUM RATINGS

额定参数

Parameter (参数)	Ratings (等级)
Chips operating temperature (芯片工作温度)	-55°C to 85°C
Chips storage temperature (芯片存储温度)	-55°C to 85°C
Storage temperature after packaging (包装后存储温度)	-10°C to 40°C
Storage humidity after packaging (包装后存储湿度)	$\leq 70\%$
Power Input (最大输入功率@25°C)	3W max. at 25°C

FUNCTIONAL SCHEMATIC

原理图



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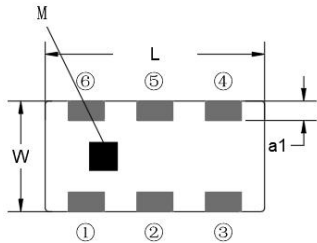
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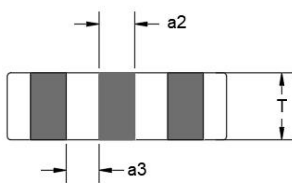
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OUTLINE DRAWING

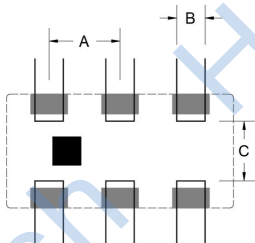
产品外形图



①: OB
②/⑤: GND
③/④: B
⑥: NC
M: MARK
UNIT: mm



PCB Land Pattern
建议焊盘尺寸布局



PIN CONNECTIONS

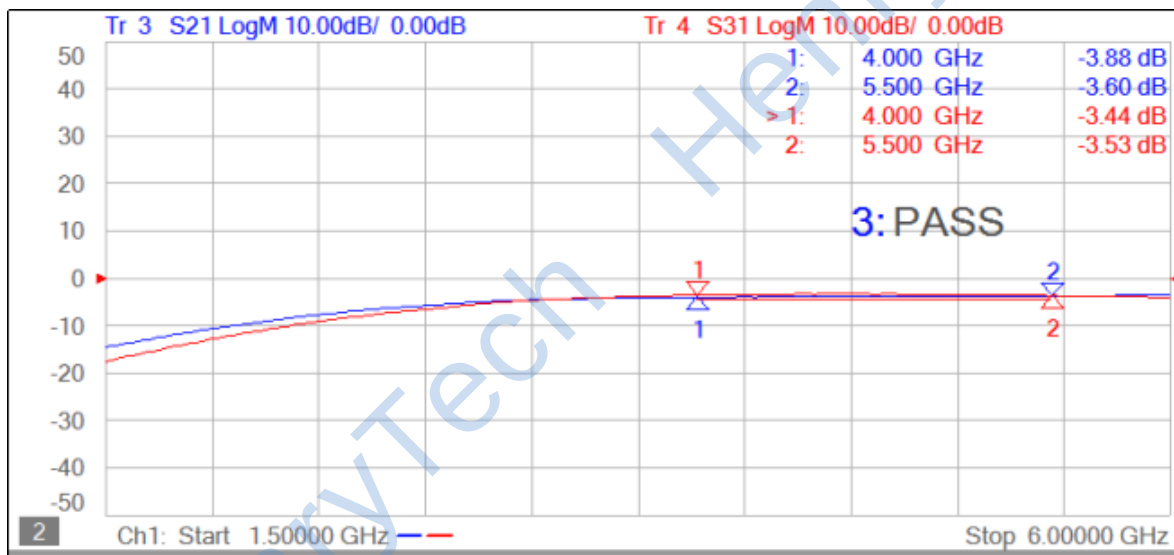
PRIMARY DOT (输入端)	1
GND or DC FEED + RF GND(接地)	2,5
SECONDARY DOT (输出端)	4
SECONDARY (输出端)	3
NO CONNECTION(未连接)	6

OUTLINE DIMENSIONS (inches) 尺寸参数

外形	L	W	T	a1	a2	a3
尺寸	2.0±0.15	1.2±0.15	1.3 max	0.25±0.15	0.3±0.15	0.3±0.15
焊盘	A	B	C			
尺寸	0.6	0.25	0.6			

Typical Parametric Curve Graph (典型参数曲线图)

Total Insertion Loss (总插入损耗,含理论分配损耗3dB)



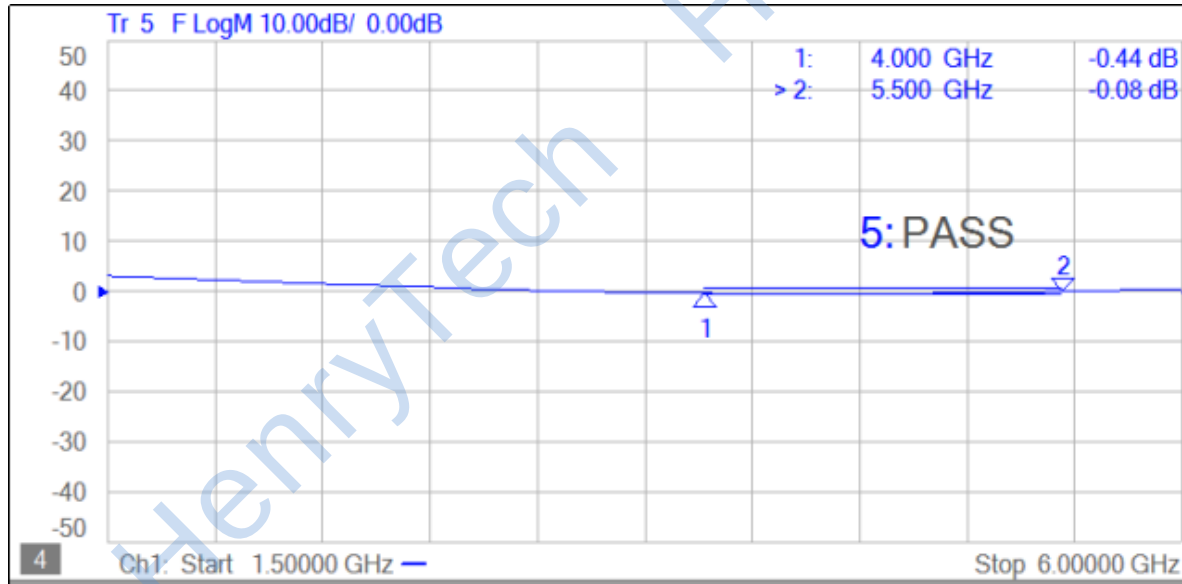
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Amplitude Balance (幅度平衡度)



Phase Balance (相位平衡度)



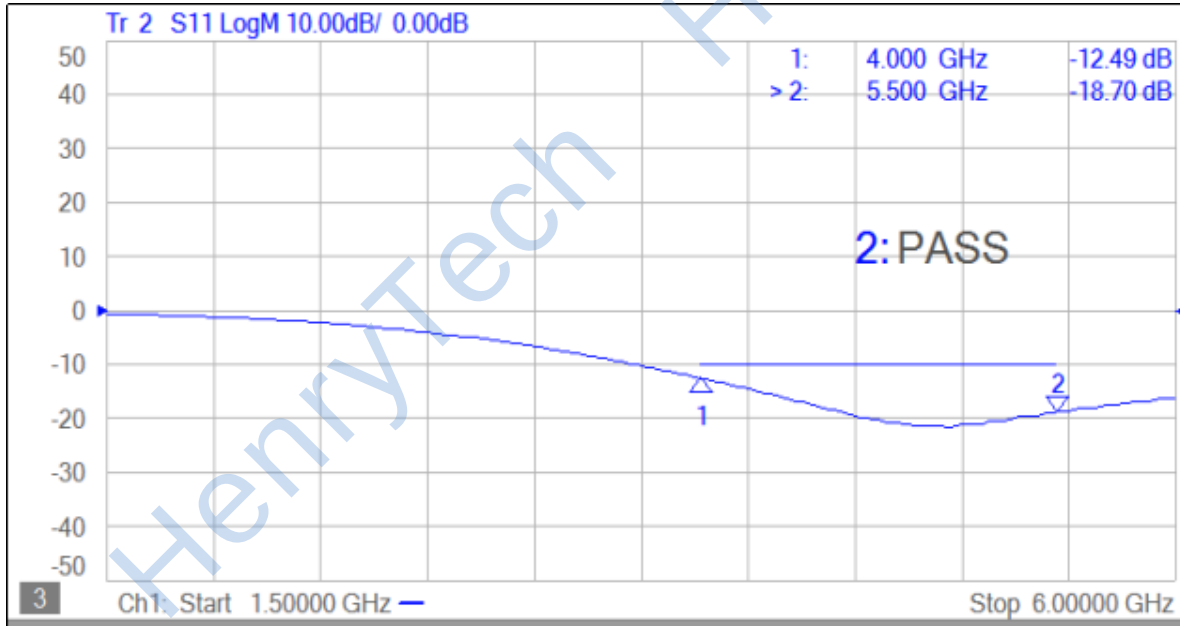
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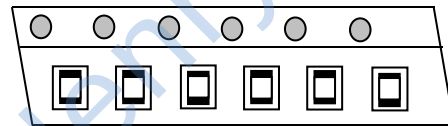
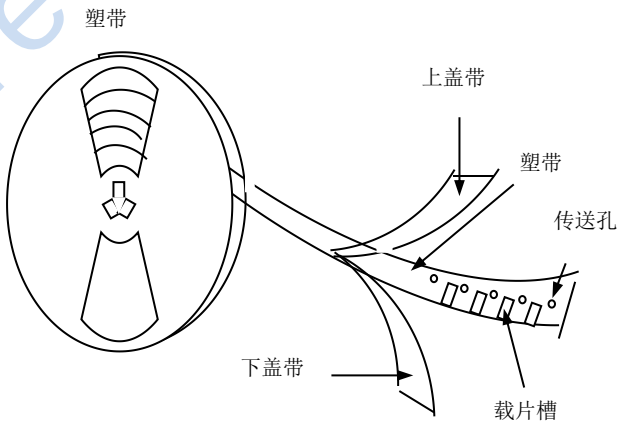
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Return Loss (回波损耗)



Packaging method (包装方式)



说明：当编带按本图所示由上往下的方向拉出编带时，传送孔位于编带的右侧。

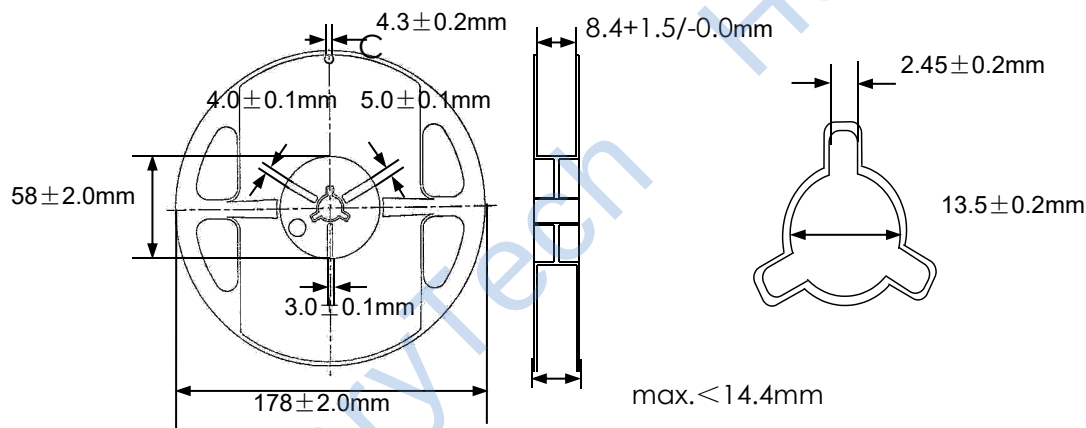
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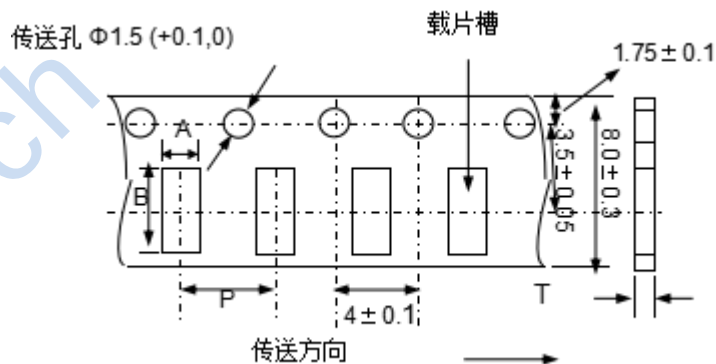
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Tape size (卷带尺寸)



Carrier size (载带尺寸)



Type	A	B	P	Tmax
2012	1.4 ± 0.1	2.2 ± 0.1	4.0 ± 0.1	1.3