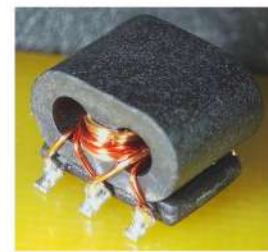


RF Balun Transformer

EBA0306-G010968

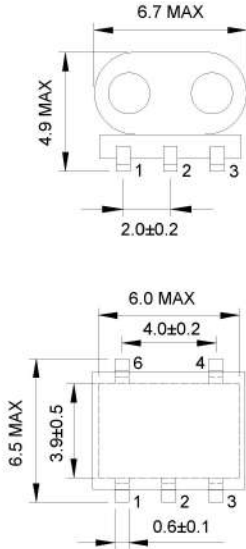
2024-09-26 Rev. 1



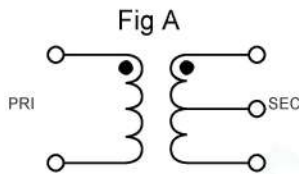
75Ω 1:4 CT Flux Coupled Transformer

5-200 MHz

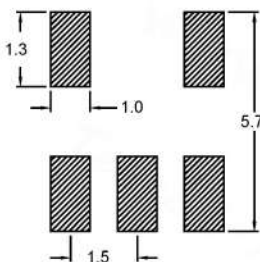
Outline Drawing(mm)



Electrical structure



Recommended layout(mm)



Pin Connections

Input	4
Output 1	3
Output 2	1
Ground	6
Centre tap (Ground)	2

Features

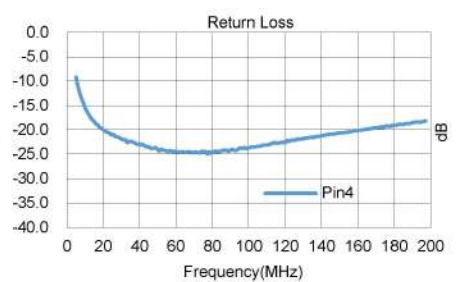
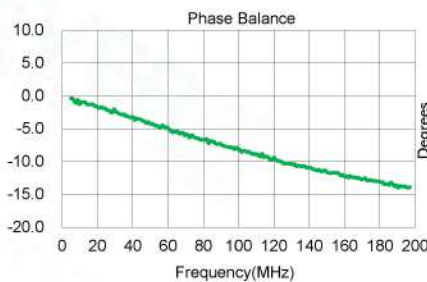
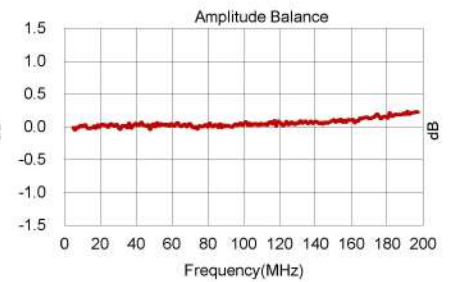
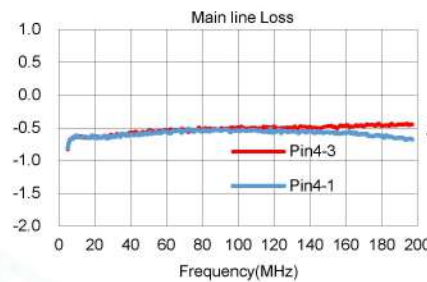
- RF Power, 1W Max
- DC Current, 500mA Max
- Operating temperature range: -40℃ to +85℃
- Storage temperature range: -55℃ to +100℃
- 260℃ Reflow Compatible
- RoHS compliant and lead free

Applications

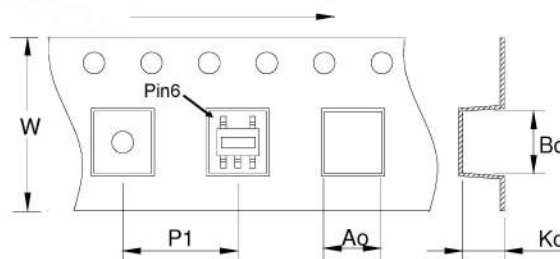
- For Docsis 3.0 & 3.1 Cable Modem.
- For Wideband Push-pull Amplifiers.
- For CATV Amplifiers Module & Set top box.
- For CATV Optical Receivers and Amplifiers.
- For VHF/UHF Transmitters and Push-pull Amplifiers.

Electrical Specifications: TA=25℃, 0dBm, Z0=75Ω

Parameter	Test Conditions	Units	Min	Typ	Max
Main line Loss (Pin4-3)	5-200MHz	dB	—	0.5	0.8
Main line Loss (Pin4-1)	5-200MHz	dB	—	0.7	1.0
Amplitude Balance	5-200MHz	dB	—	0.3	0.5
Phase Balance	5-200MHz	°	—	10.0	15.0
Input Return Loss(Pin4)	5-200MHz	dB	10.0	20.0	—



Carrier Tape Orientation



Tape & Reel Information

Parameter	Units	Value
Qty per reel	PCS	1000
Reel Size	mm	330
Tape Width	mm	16.0
Pitch	mm	12.0
Ao	mm	6.90
Bo	mm	6.70
Ko	mm	5.20

RF Balun Transformer

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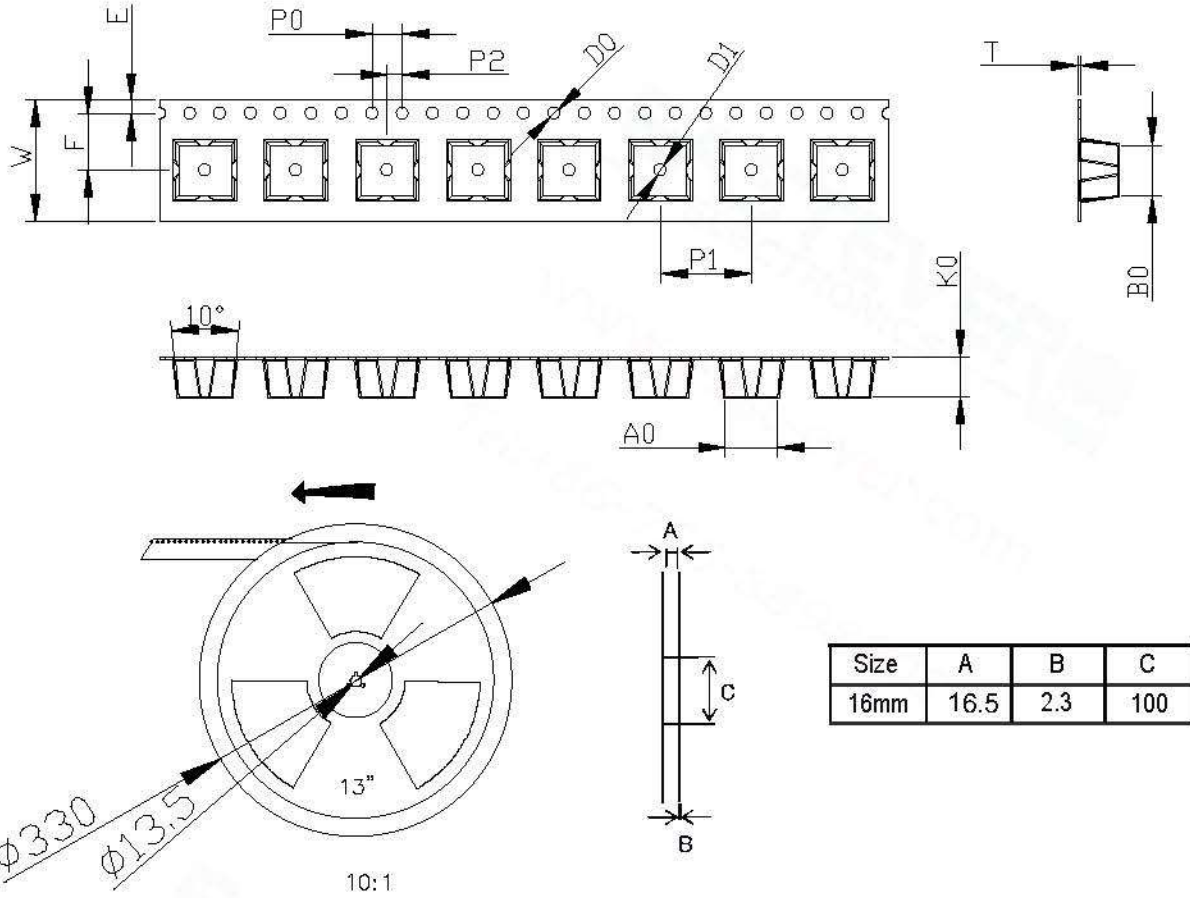
2024-09-26 Rev. 1



75Ω 1:4 CT Flux Coupled Transformer

5-200 MHz

Tape & Reel Dimensions



Item	W	A0	B0	K0	P0	P1	P2	F	E	D0	D1
Dim	16.0	6.90	6.70	5.20	4.00	12.0	2.00	7.50	1.75	1.50	1.50

Packing state

- 1) Taping quantity
1000 pcs. / Reel
- 2) Outer Box quantity * Boxed quantity is reference.
12,000pcs. max./ Outer Box

Safekeeping

- 1) Safekeeping condition.
Temperature: 0 degrees Celsius – 40 degrees Celsius, the humidity: 10 – 70%RH
There are not direct rays of the sun and corrosion with the gas, dew condensation in a packing state.
- 2) Preservation period.
Less than six months. The part which passed uses six months by confirmation made by the soldering of the electrode.

RF Balun Transformer

EBA0306-G010968

2024-09-25 Rev. 1



75Ω 1:4 CT Flux Coupled Transformer

5-200 MHz

Windngs

Winding	Wire	Star	Turns	End
6-4	2UEWF 0.20-Y	6	3.0	4
1-2	2UEWF 0.20-Y	1	3.0	2
2-3	2UEWF 0.20-R	2	3.0	3

Electrical Characteristics:TA=25°C

Property	Test Conditions	Typ	Units	Tolerance
Inductance Pin1-3	100KHz/0.1V	13.0	uH	±30%
Inductance Pin6-4		3.20	uH	±30%

Material Bom:

No.	ITEM	MATERIAL	TYPENO AND STANDARD	SUPPLIER/MANUFACTURER
1	Wire	Copper	0.20 Polysol-180 Grade 2	Elektrisola(Malaysia)SDN.BHD.
2	Solder	Sn	Sn99.3,Cu0.7	Hongqiao nano technology(shenzhen)co.,ltd
3	Core	N5C	RID6.5X3.5X5	Encore electronics technology co;ltd
4	Base	PM9630	Phenolic molding	Sumitomo bakelite(Nantong) co.,ltd
5	Pin	C5191	Phosphor bronze	Dongguan city heng wei electronic technoogy co.,ltd
6	Glue	Epoxy	WK13-15	Winning hi-tech co.,ltd

Recommended Soldering Temperature Graph:

Typical RoHS Reflow Profile

