

Features

- 1:1 Impedance Ratio
- Surface Mount
- Tape and reel packaging available



Description

BORNTEK's B8T-100T-A1 is a 1:1 RF Transformer in a low cost, high Q, high permeability ferrite core with small size and surface mount package.

Ideally suited for high volumes Broadband CATV or Digital tuner applications. The parts are packaged in tape & reel.

Electrical Specifications:

Parameter	Frequency	Units	Min.	Typ	Max.
RF Frequency	50 - 1200	MHz	—	—	—
Insertion Loss / PIN 4 -3	50 - 600	dB	—	0.8	1.0
	600 - 1200		—	1.2	1.5
Insertion Loss / PIN 4 -1	50 - 600	dB	—	0.8	1.0
	600 - 1200		—	1.2	1.5
Amplitude Unbalance	50 - 600	dB	—	0.1	0.2
	600 - 1200		—	0.5	0.8
Phase Unbalance	50 - 600	Degrees	—	2.0	4.0
	600 - 1200		—	5.0	10.0

Absolute Maximum Ratings

Parameter	Absolute Maximum
DC Power	250 mW
DC Current	50 mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C

※ Operation of this device above any one of these parameters
Ta @ 25 deg C / Zo @ 50 Ohms

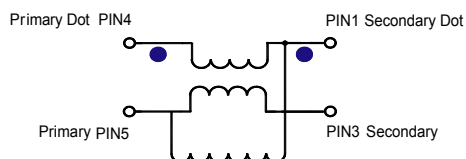
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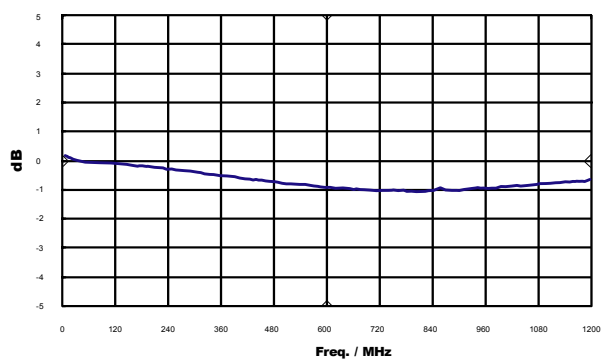
Pin Configuration

Pin No.	Function
1	Output Thru Leg
2	Not connected
3	Output Coupled Led
4	Input
5	Ground

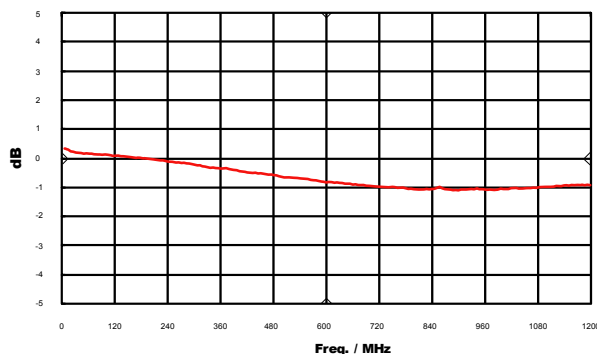
Schematic



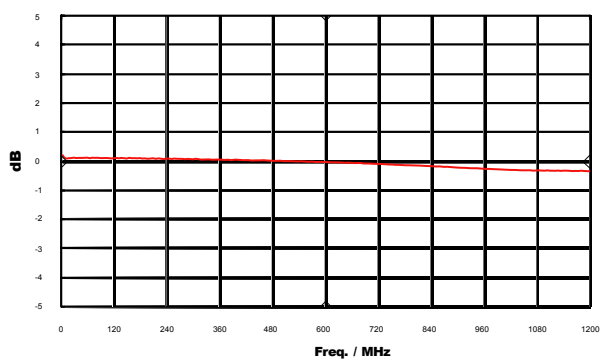
Insertion Loss PIN 4 - 1



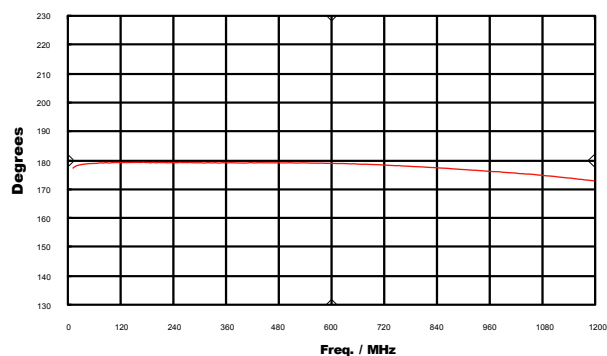
Insertion Loss PIN 4 - 3



Amplitude Unbalance

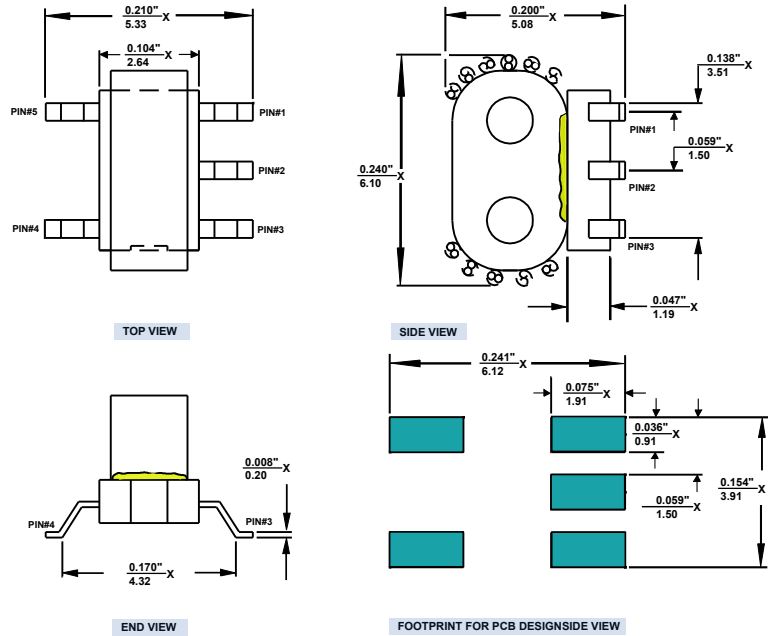


Phase Unbalance

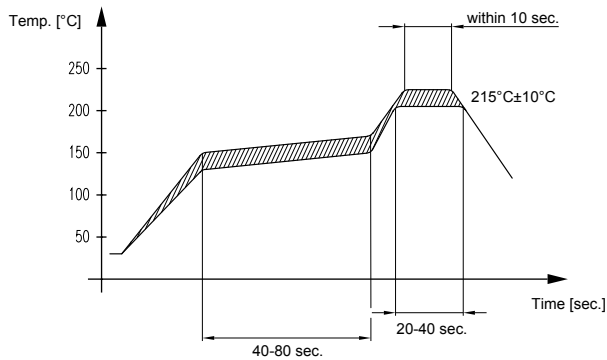


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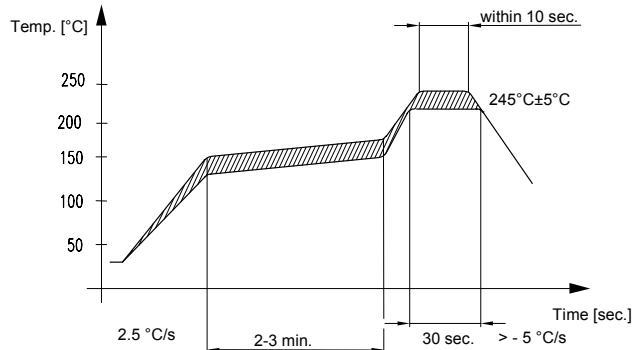
#A8 Package ($\frac{\text{Inch}}{\text{mm}} \times$)



Soldering information:



Eutectic SnPb solder paste profile



Leadfree solder paste profile

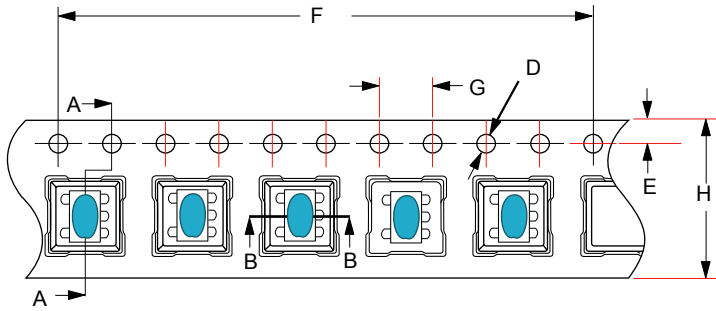
Reflow SMD type component / recommended Maximum soldering temperature:

1. Eutectic SnPb solder paste / 235°C (max. 2 sec.) / 225°C (max. 10 sec.)
2. Leadfree solder paste / 260°C (max. 2 sec.) / 250°C (max. 10 sec.)

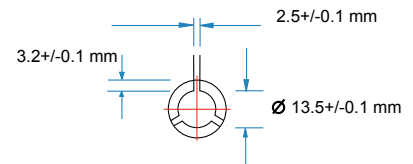
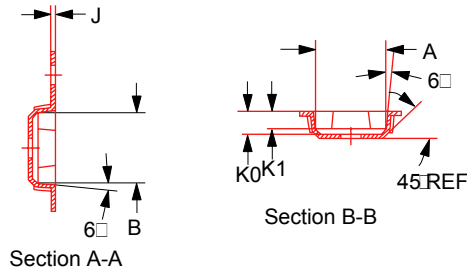
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Tape & Reel Information:



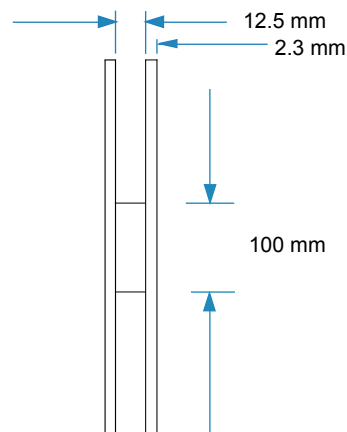
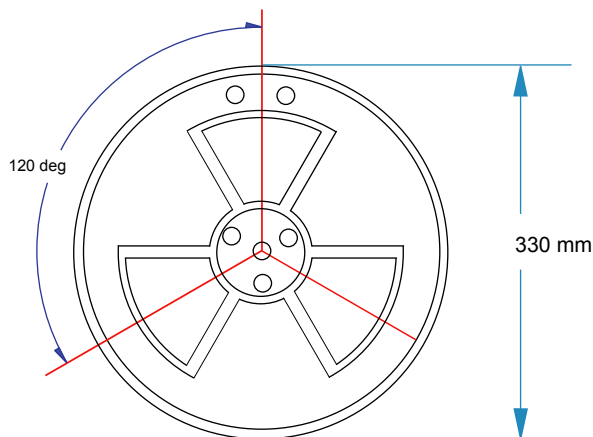
SYMBOL	SIZE (mm)
A	6.5 ±0.10
B	6.0 ±0.10
D	1.5 ±0.10
E	1.75 ±0.10
K0	5.15 ±0.10
K1	5.0 ±0.10
F	40.0 ±0.10
G	4.0 ±0.10
J	0.45 ±0.01
H	12.0 ±0.10



Note: Surface resistivity to be $<10^{12}$ Ohms/square

Notes:

Allowable camber to be 1 mm per 100 mm in length.
All dimensions in mm.



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Package Information:

Quantity	P/N	Dimension
1500 pcs per Reel	#1PCA-W12P08H3.6 / Carrier	Dia. 330mm
Two Reel / 3K pcs	#1B-G3B / Small Carton	340 x 340 x 50 mm
8 Small Carton / 24K pcs	#1B-G7 / Big Carton	360 x 360 x 420 mm

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