Apps Electronics Limited
雅思電子有限公司

Agent: 台灣廣登/上海旭谷 QuadRep Electronics Ltd sales@quadrep.com.tw

ABT-P12-50011-205 Balun Trasformer(10-6000MHz)

Description

SCOPE
• ABT-P12-50011-205 is a 1:1 balun transformer in a SMT package.
APPLICATIONS
• differential modulator/demodulator and active mixers
• wideband push-pull amplifiers
• LTE, Cellular, PCS, UMTS, WiFi, WiMAX
FEATURES
• Surface mount
• Impedance ratio: 1:1
• RoHS compliant and Pb free
• Available on tape and reel

PART NUMBER

ABT	-	P12	-	50011	-	205
①②		③④		⑤		⑥

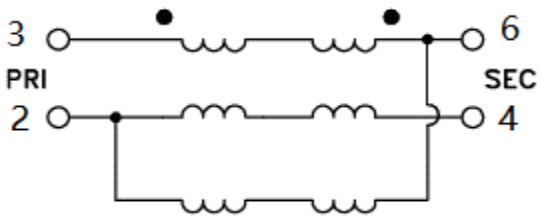
① Apps Electronics Limited
② Product series
③ Form Factor
④ Size Number
⑤ Impedance/Ratio
⑥ Design series Code

Form Factor
B: Bobbin/Pin Base
P: PCB base
C: Ceramic base or SMD core
F: Ferrite SMD core
Other…

12: Form sequence code
50011: 50 ohm, 1 : 1 Ratio
205: Design series Code

Series	Function description
BT/BL/WB	**Balun Transformer**
PD/PS	Power Divider/Power Splitter
PC	Power Combiner
CP	Directional Coupler, branch line hybrid/coupler
CL	Coupler+LPF
TF	RF Transformer(non-Balun, SE/SE, BA/BA)
LP/HP/BP/DP/TP	Filter(Lowpass/Highpass/ Bandpass/Diplexer/Triplexer)
PT/PM	Power Transformer/Power Module
CM	C.M. Choke
E	Lan Transformer/RJ45/Air Coil
Other…	

FUNCTIONAL SCHEMATIC



Pin Configuration

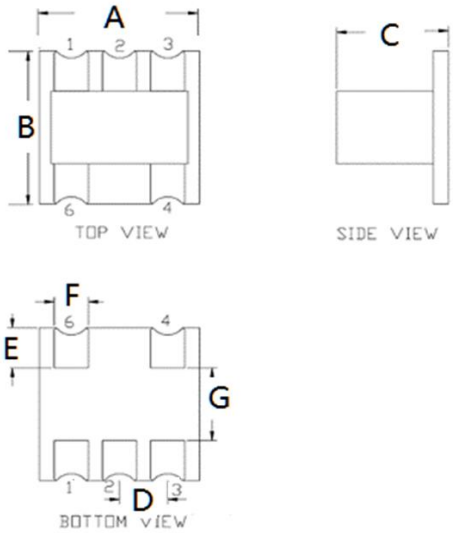
Pin No.	Function
1	Not used
2	Primary
3	Primary Dot
4	Secondary
6	Secondary Dot

Apps Electronics Limited
雅思電子有限公司

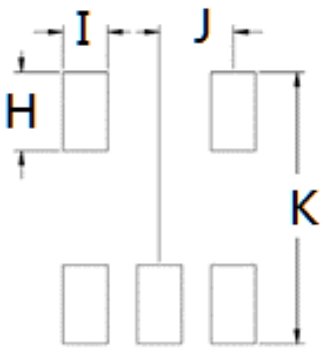
Agent: 台灣廣登/上海旭谷 QuadRep Electronics Ltd sales@quadrep.com.tw

ABT-P12-50011-205 Balun Trasformer(10-6000MHz)

DIMENSIONS



PCB LAYOUT



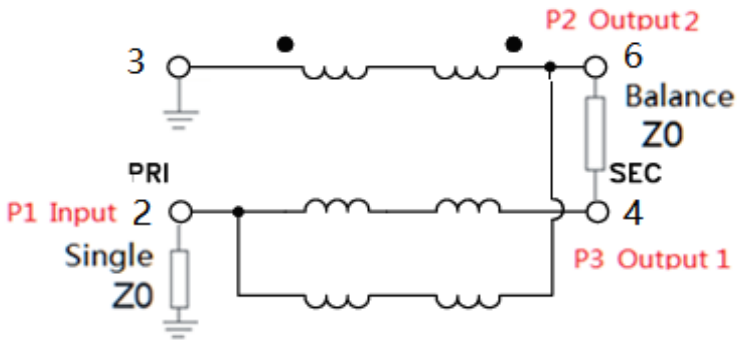
A	B	C	D	H	I	J
4.21	4.21	2.40	1.27	1.40	0.76	1.57
E	F	G		K		
1.11	0.90	2.00		4.83		

Unless otherwise stated dimensions are in mm

Tolerance: .xx ± 0.25, .xxx ± 0.05

APPLICATION & TEST CIRCUIT

Z0=50Ω



RF ports: P1/P2/P3

ABSOLUTE MAXIMUM RATINGS

Parameter	Value
Input Power	200mW Max
DC Current	30mA Max
Operating Temperature Range	-40 to 85℃
Storage Temperature Range	-55 to 100℃

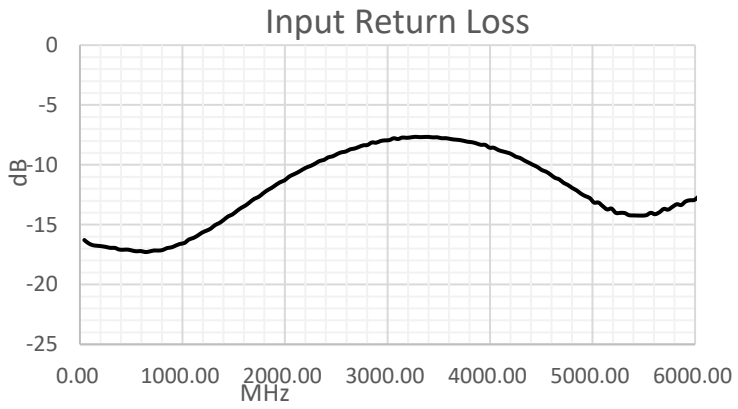
Apps Electronics Limited
雅思電子有限公司

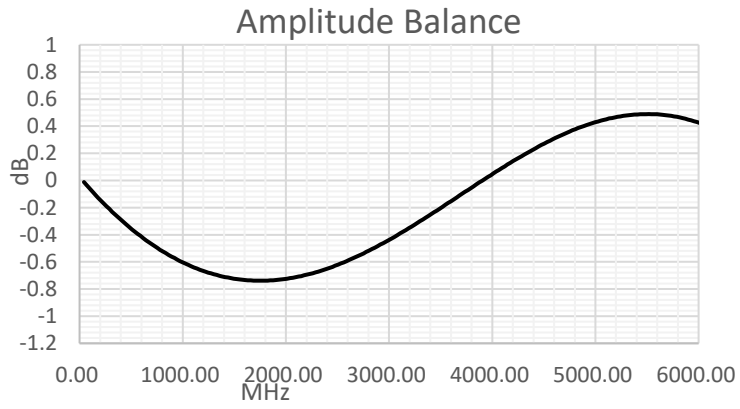
Agent: 台灣廣登/上海旭谷 QuadRep Electronics Ltd sales@quadrep.com.tw

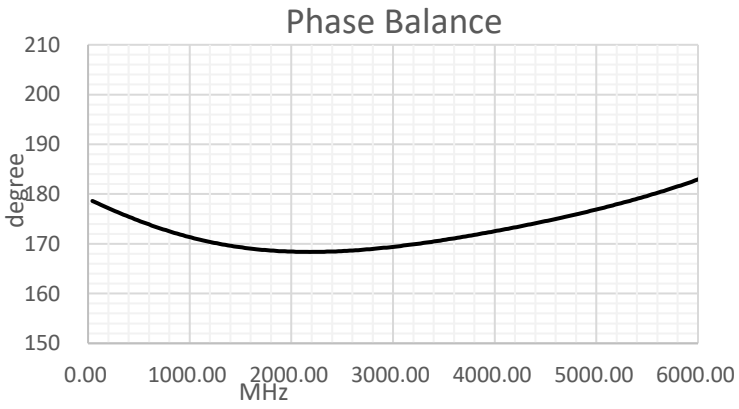
ELECTRICAL SPECIFICATIONS@25℃:

Parameters (P#: ENA PORT)	frequency band	Min.	Typ.	Max.	Unit
Port Impedance, Z0 (P1 / P2 / P3)			50 /25 25		Ohm
Insertion Loss	10-5000MHz		1.8	2.5	dB
	5000-6000MHz		2.4	3.0	dB
Amplitude Balance	10-6000MHz		0.5		dB
Phase Balance	10-6000MHz		8.0		Deg
Input Return Loss	10-6000MHz		13		dB

TEST CURVE



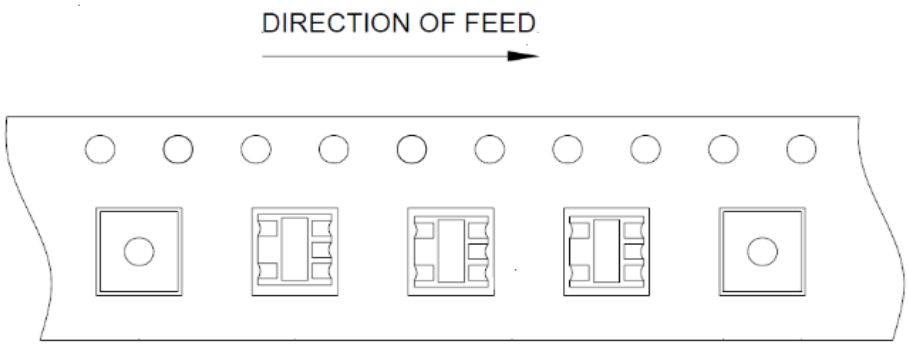


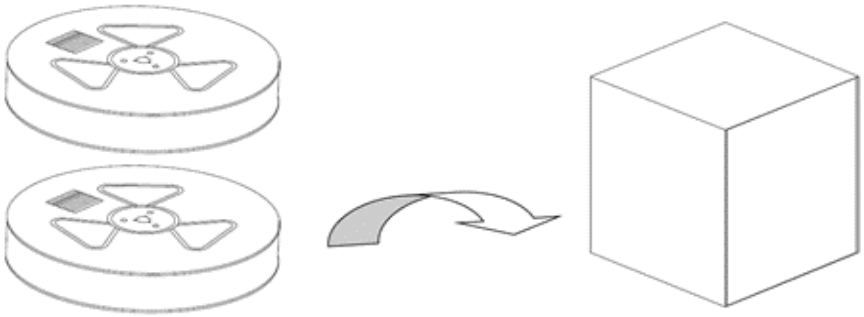


Apps Electronics Limited
雅思電子有限公司

Agent: 台灣廣登/上海旭谷 QuadRep Electronics Ltd sales@quadrep.com.tw

PACKING





Ten Reel

Export Caton

Quantity per reel: 2000pcs

Quantity per export carton: 20000pcs