Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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Thin Film Balun Transformers

For DVB-H/T, ISDB-T

TTB Series

Type: **TTB12G51 (1.25×1.0×0.6mm)**

Issue date: December 2010

- All specifications are subject to change without notice.
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

TDK

Thin Film Chip Baluns For DVB-H/T and ISDB-T

Conformity to RoHS Directive

TTB Series TTB12G51

FEATURES

- This is an optimal, thin film chip balun transformer for 50 to 50Ω with low loss at DVB-H/T and ISDB-T frequency bands(174 to 860MHz).
- Does not contain lead and is compatible with lead-free soldering.
- It is a product conforming to RoHS directive.

APPLICATIONS

Balanced/unbalanced conversion for DVB-H/T and ISDB-T radio frequency inputs

PRODUCT IDENTIFICATION

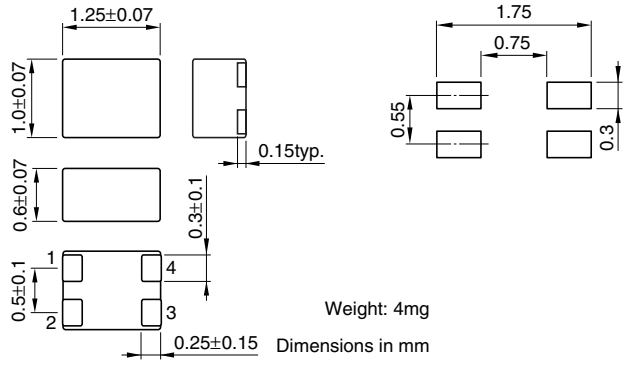
TTB	12	G51	-	900	-	2P	-	T	20
(1)	(2)	(3)		(4)		(5)		(6)	(7)

(1) Series name
(2) Case size
(3) Product identification number
G51: Z_0=50Ω
(4) Common mode impedance
900: 90Ω [at 100MHz]
(5) Number of line
2P: 2-line
(6) Packaging style
T: ø180mm reel taping
(7) TDK internal code

PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	4000 pieces/reel

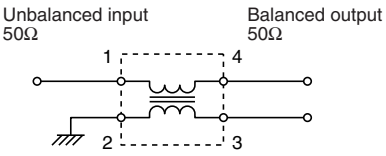
SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



Weight: 4mg

Dimensions in mm

CIRCUIT DIAGRAM



・No polarity

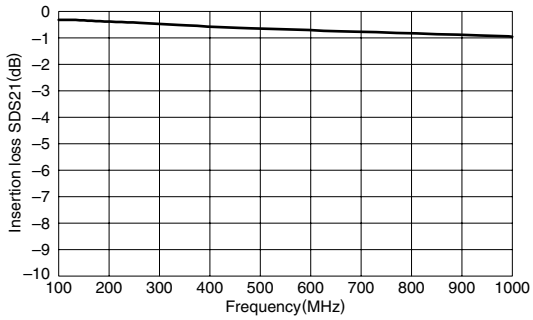
ELECTRICAL CHARACTERISTICS

Part No.		TTB12G51-900-2P
Characteristics impedance		50Ω typ.
DC resistance	[1 line]	1.7Ω max.
Rated current Idc		0.1A max.
Rated voltage Edc		10V max.
Insulation resistance		10MΩ min.
Amplitude balance at balanced port	[174 to 860MHz]	0±1.5dB
Phase balance at balanced port	[174 to 860MHz]	180±15deg.
Insertion loss	[174MHz]	0.5dB typ.
	[860MHz]	0.7dB typ.
Operating temperature ranges		–25 to +85°C

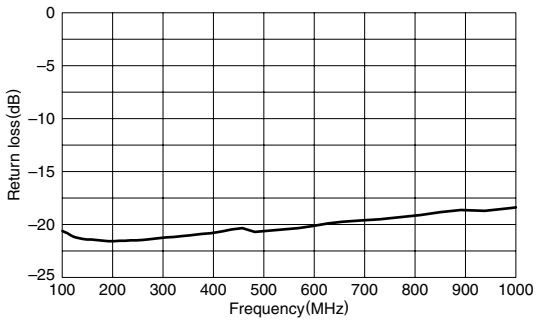
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

FREQUENCY CHARACTERISTICS

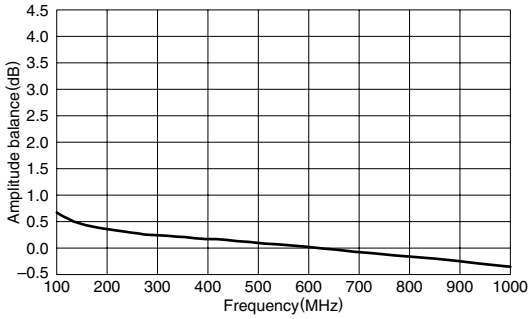
INSERTION LOSS



RETURN LOSS



AMPLITUDE BALANCE at BALANCED PORT



PHASE BALANCE at BALANCED PORT