# imall

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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(1/2)

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

#### TTB Series TTB08G51

#### FEATURES

- This is an optimal, thin film chip balun transformer for 50 to  $50\Omega$  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

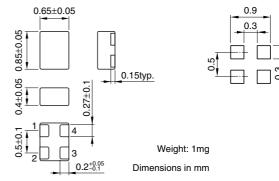
#### **PRODUCT IDENTIFICATION**

TTB	08	G51	- 350 -	2P	- T	20
(1)	(2)	(3)	(4)	(5)	(6)	(7)

- (1) Series name
- (2) Case size
- (3) Product identification number G51:  $Z_0=50\Omega$
- (4) Common mode impedance  $350: 35\Omega$  [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	10000 pieces/reel

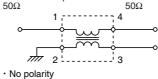


SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD

#### **CIRCUIT DIAGRAM**

PATTERN

Unbalanced input Balanced output



#### **ELECTRICAL CHARACTERISTICS**

Part No.	TTB08G51-350-2P	
Characteristics impedance		50Ω typ.
DC resistance	[1 line]	1.5Ω max.
Rated current Idc	0.1A max.	
Rated voltage Edc	10V max.	
Insulation resistance	10M $\Omega$ min.	
Amplitude balance at balanced port	[174 to 860MHz]	0±2.0dB
Phase balance at balanced port	[174 to 860MHz]	180±30deg.
Incertion loss	[174MHz]	0.6dB typ.
Insertion loss	[860MHz]	1.0dB typ.
Operating temperature ranges	–25 to +85°C	

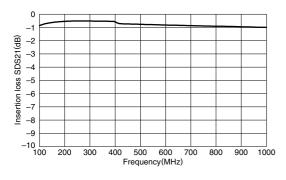
• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

#### 001-01 / 20130901 / ttb\_balun\_ttb08g51\_en

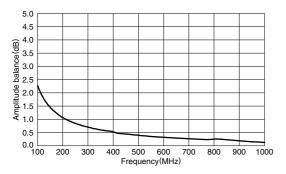
<sup>•</sup> All specifications are subject to change without notice.

**公TDK** 

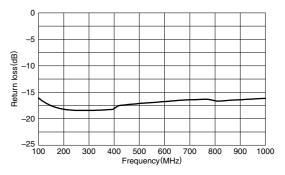
#### FREQUENCY CHARACTERISTICS INSERTION LOSS



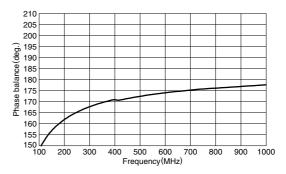
#### AMPLITUDE BALANCE at BALANCED PORT



#### **RETURN LOSS**



PHASE BALANCE at BALANCED PORT



• All specifications are subject to change without notice.