

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

Conformity to RoHS Directive

## TTB Series TTB08G51

### 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

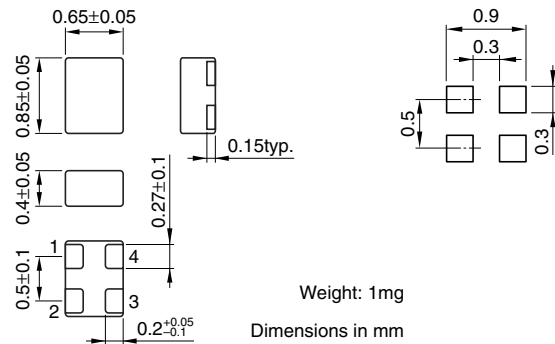
TTB	08	G51	-	350	-	2P	-	T	20
(1)	(2)	(3)	(4)	(5)	(6)	(7)			

- (1) Series name  
 (2) Case size  
 (3) Product identification number  
 G51:  $Z_0=50\Omega$   
 (4) Common mode impedance  
 350: 35Ω [at 100MHz]  
 (5) Number of line  
 2P: 2-line  
 (6) Packaging style  
 T:  $\varnothing$  180mm reel taping  
 (7) TDK internal code

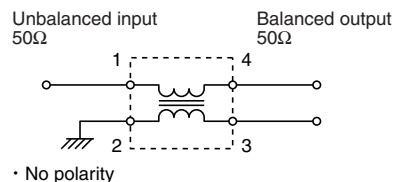
### PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	10000 pieces/reel

### SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



### CIRCUIT DIAGRAM



### ELECTRICAL CHARACTERISTICS

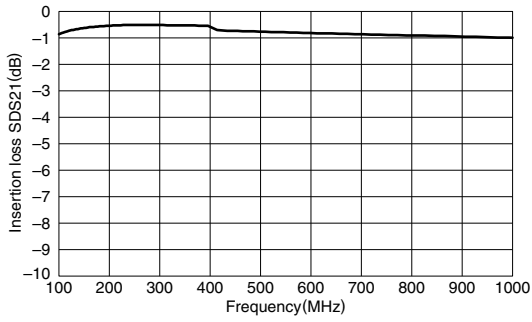
Part No.	TTB08G51-350-2P	
Characteristics impedance	50Ω typ.	
DC resistance	[1 line]	1.5Ω max.
Rated current $I_{dc}$	0.1A max.	
Rated voltage $E_{dc}$	10V max.	
Insulation resistance	10MΩ min.	
Amplitude balance at balanced port	[174 to 860MHz]	0±2.0dB
Phase balance at balanced port	[174 to 860MHz]	180±30deg.
Insertion loss	[174MHz]	0.6dB typ.
	[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.

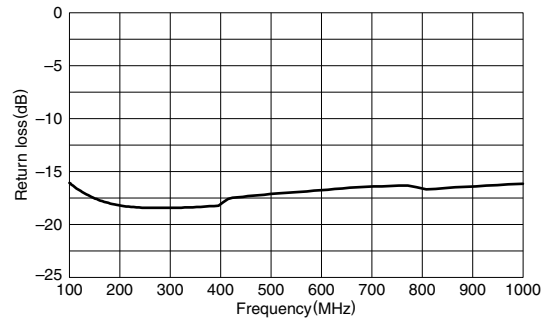
• All specifications are subject to change without notice.

### FREQUENCY CHARACTERISTICS

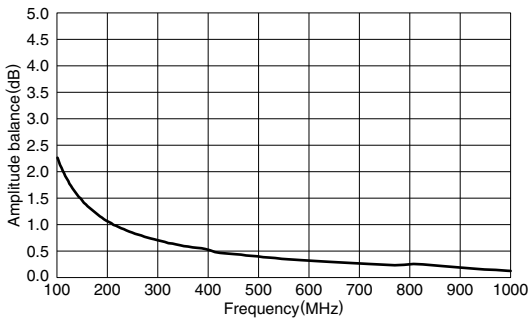
#### INSERTION LOSS



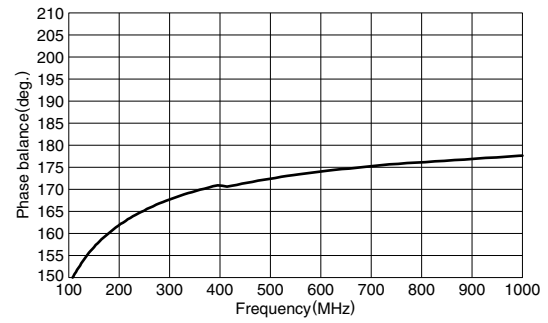
#### RETURN LOSS



#### AMPLITUDE BALANCE at BALANCED PORT



#### PHASE BALANCE at BALANCED PORT



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