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

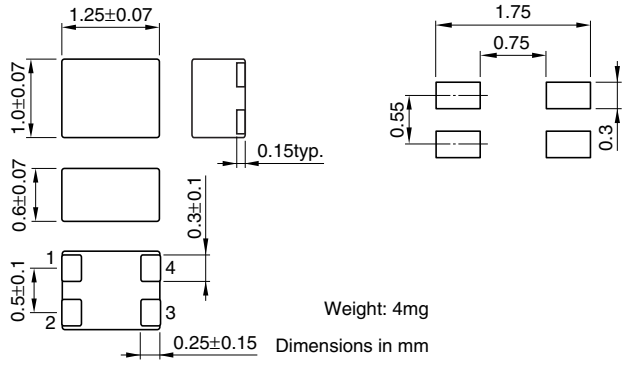
TTB	12	G51	-	900	-	2P	-	T	20
(1)	(2)	(3)		(4)		(5)		(6)	(7)

(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

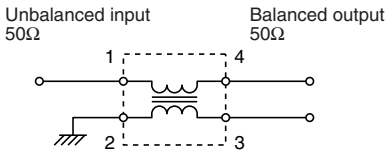
PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	4000 pieces/reel

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



CIRCUIT DIAGRAM



・No polarity

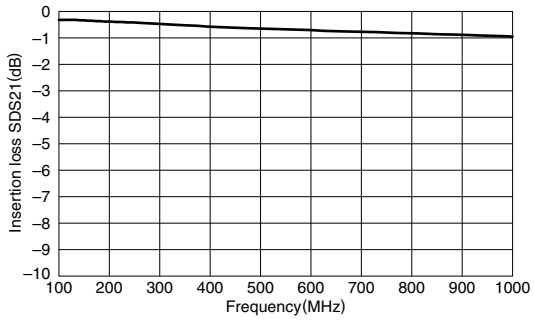
ELECTRICAL CHARACTERISTICS

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

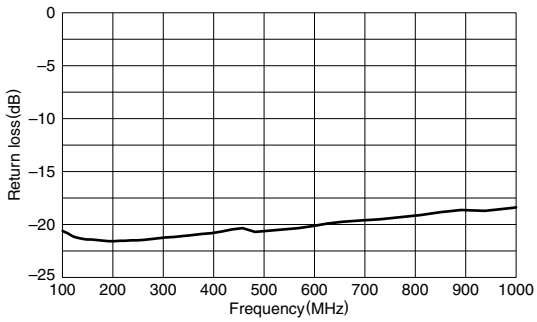
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

FREQUENCY CHARACTERISTICS

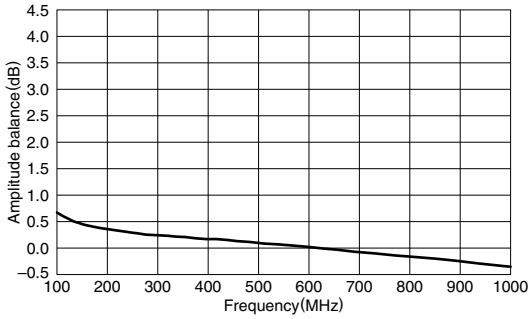
INSERTION LOSS



RETURN LOSS



AMPLITUDE BALANCE at BALANCED PORT



PHASE BALANCE at BALANCED PORT