

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

Conformity to RoHS Directive

TCM Series TCM12B51

FEATURES

- This is an optimal, thin film chip balun transformer for 50 to 50Ω with low loss ($IL=0.7\text{dB}$) at DVB-H/T and ISDB-T frequency bands (174 to 860MHz).
- It is a product conforming to RoHS directive.



APPLICATIONS

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

PRODUCT IDENTIFICATION

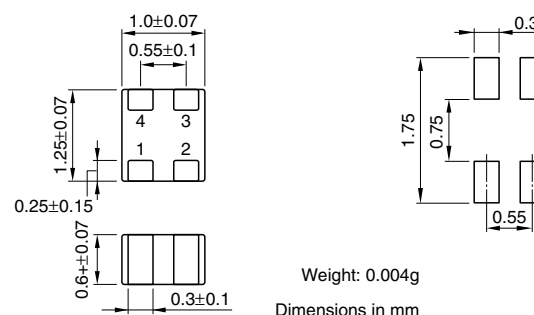
TCM	12	B51	-	900	-	2P	-	T	□□
(1)	(2)	(3)	(4)	(5)	(6)	(7)			

- (1) Series name
 (2) Case size
 (3) Product identification number
 B51: $Z_0=50\Omega$
 (4) Common mode impedance
 900: 90Ω [at 100MHz]
 (5) Number of line
 2P: 2-line
 (6) Packaging style
 T: $\phi 180\text{mm}$ reel taping
 (7) TDK internal code

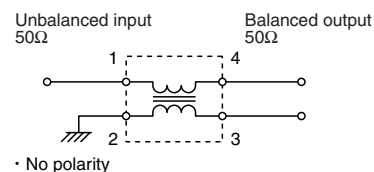
PACKAGING STYLE AND QUANTITIES

Packaging style	Reel	Quantity
Taping	$\phi 180\text{mm}$	4000 pieces/reel

SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



CIRCUIT DIAGRAM



ELECTRICAL CHARACTERISTIC

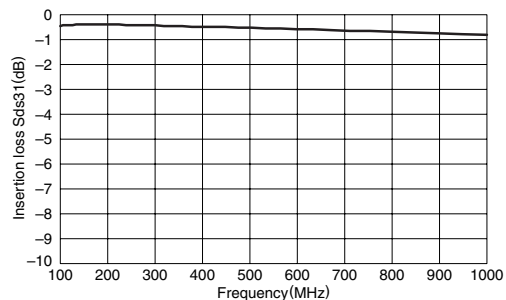
Part No.	TCM12B51-900-2P	
Characteristics impedance	50Ω typ.	
DC resistance	[1 line]	0.85Ω max.
Rated current I_{dc}	100mA max.	
Rated voltage E_{dc}	10V max.	
Insulation resistance	10MΩ min.	
Amplitude imbalance at balanced port	[174 to 860MHz]	$0\pm 1.5\text{dB}$
Phase imbalance at balanced port	[174 to 860MHz]	$180\pm 15\text{deg.}$
Insertion loss	[174MHz]	0.4dB 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.

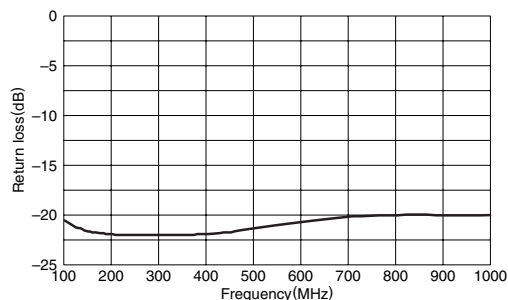
- All specifications are subject to change without notice.

FREQUENCY CHARACTERISTICS

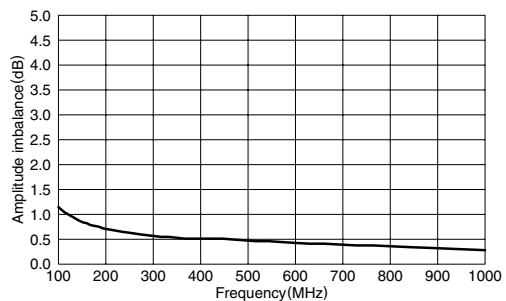
INSERTION LOSS



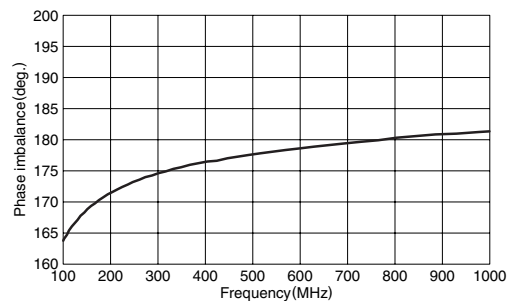
RETURN LOSS



AMPLITUDE IMBALANCE at BALANCED PORT



PHASE IMBALANCE at BALANCED PORT



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TDK Global Network

Contact us

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