TDK

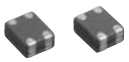
Thin Film Chip Baluns For DVB-H/T, ISDB-T

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=0.7dB) 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

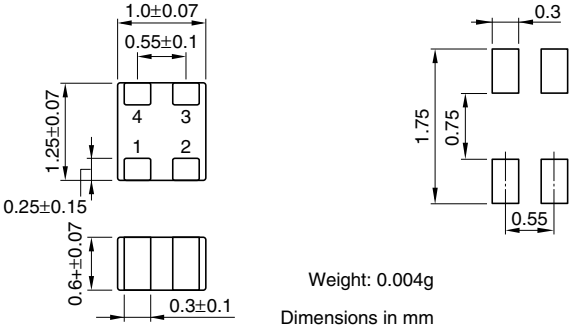
TCM	12	B51	-	900	-	2P	-	T	□□
(1)	(2)	(3)		(4)		(5)		(6)	(7)

(1) Series name
(2) Case size
(3) Product identification number
B51: Z_0=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	Reel	Quantity
Taping	ø180mm	4000 pieces/reel

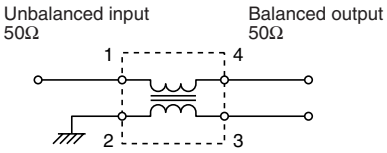
SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERN



Weight: 0.004g

Dimensions in mm

CIRCUIT DIAGRAM



・No polarity

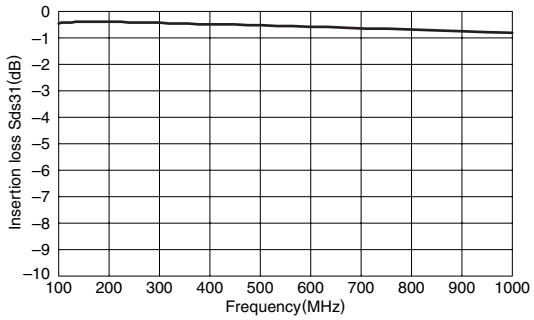
ELECTRICAL CHARACTERISTIC

Part No.		TCM12B51-900-2P
Characteristics impedance		50Ω typ.
DC resistance	[1 line]	0.85Ω max.
Rated current Idc		100mA max.
Rated voltage Edc		10V max.
Insulation resistance		10MΩ min.
Amplitude imbalance at balanced port	[174 to 860MHz]	0±1.5dB
Phase imbalance at balanced port	[174 to 860MHz]	180±15deg.
Insertion loss	[174MHz]	0.4dB typ.
	[860MHz]	0.7dB typ.
Operating temperature ranges		–25 to +85°C

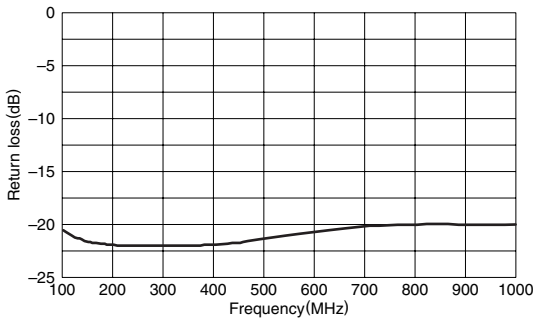
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

FREQUENCY CHARACTERISTICS

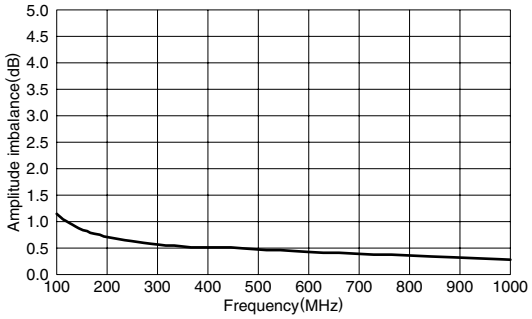
INSERTION LOSS



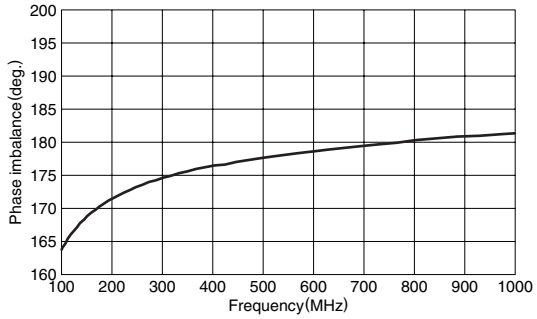
RETURN LOSS



AMPLITUDE IMBALANCE at BALANCED PORT



PHASE IMBALANCE at BALANCED PORT



TDK Global Network

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