Common Mode Filters

For high-speed differential signal line/general signal line

ZCYS series

Type: **ZCYS51R5**

Issue date: September 2011

- All specifications are subject to change without notice.
- 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.

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Conformity to RoHS Directive

ZCYS Series ZCYS51R5

FEATURES

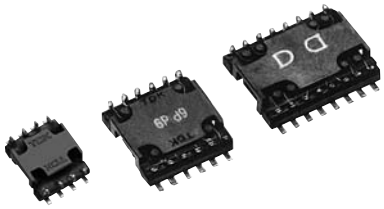
- The ZCYS series common mode filters provide highly effective noise rejection characteristics without distorting the transmission signal. Especially, most available for USB interface circuit.
- Well suited as a countermeasure against high-frequency radiation noise in small signal interface lines, this product is a space-efficient solution for multiple-line cable applications.
- A high level of miniaturization has been achieved with a maximum height of 2.5mm.

APPLICATIONS

Personal computers, telephones, LANs, ISDNs, digital PBXs, word processors, electronic games, palm-sized computing devices, CTVs, CD-ROM drives, 8mm video cameras.

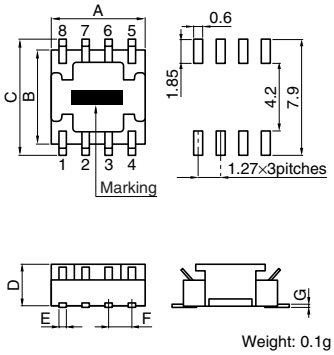
PACKAGING STYLE AND QUANTITIES

Packaging style	Part No.	Quantity
Taping	ZCYS51R5-M4PAT-01	3000 pieces/reel
	ZCYS51R5-M6PT-01	2000 pieces/reel
	ZCYS51R5-M8PT-01	2000 pieces/reel



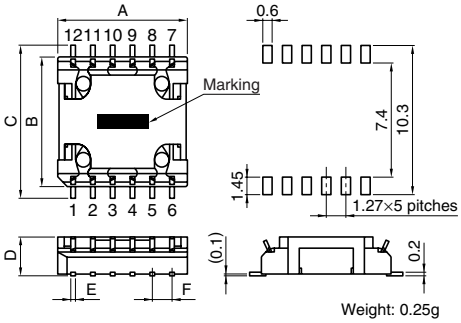
SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERNS

ZCYS51R5-M4PAT-01



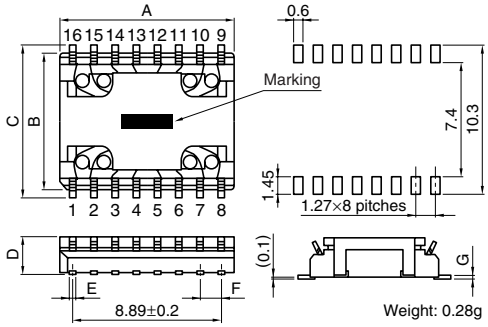
Weight: 0.1g

ZCYS51R5-M6PT-01



Weight: 0.25g

ZCYS51R5-M8PT-01



Weight: 0.28g

Dimensions in mm

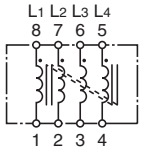
Part No.	A max.	B	C±0.5	D max.	E	F±0.15	G
ZCYS51R5-M4PAT*1-01*2	5.7	6.0	7	2.5	0.4	1.27	0.2
ZCYS51R5-M6PT-01	8.5	8.5	9.4	2.5	0.4	1.27	0.2
ZCYS51R5-M8PT-01	11	8.5	9.4	2.5	0.4	1.27	0.2

*1 T means the taping product.

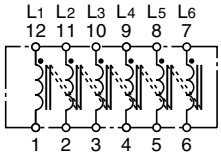
*2 The "-01" designation at the end of the product code indicates Lead-free compatible product.

CIRCUIT DIAGRAMS

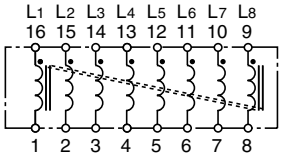
ZCYS51R5-M4PAT-01



ZCYS51R5-M6PT-01



ZCYS51R5-M8PT-01



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ELECTRICAL CHARACTERISTICS

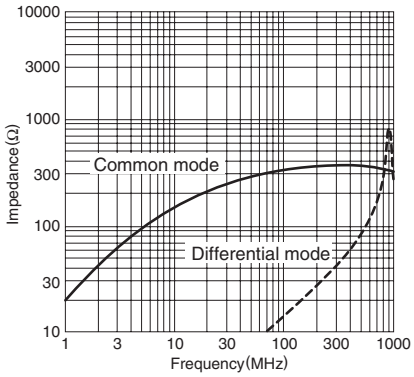
Part No.	ZCYS51R5-M4PAT-01	ZCYS51R5-M6PT-01	ZCYS51R5-M8PT-01
Rated voltage Edc(V)	50	50	50
Rated current (A)	0.5	0.5	0.5
Test voltage Edc(V) [Between terminals for 5s]	125	125	125
Insulation resistance (MΩ) [Between terminals at DC.50V for 1min]	100min.	100min.	100min.
DC resistance (Ω) [each line]	0.2max.	0.25max.	0.3max.
Operating temperature range(°C)	–25 to +85	–25 to +85	–25 to +85
Impedance (Ω) [+5 to +35°C]	200min. [50 to 500MHz]	200min. [50 to 300MHz]	100min. [100 to 300MHz]

TYPICAL ELECTRICAL CHARACTERISTICS

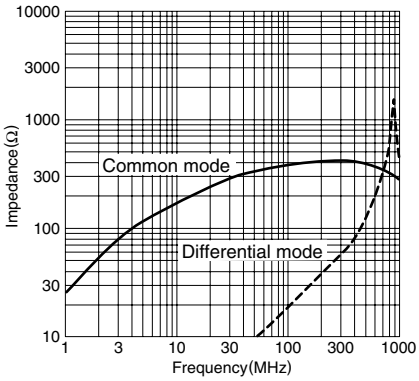
IMPEDANCE vs. FREQUENCY CHARACTERISTICS

(for 1 element)

ZCYS51R5-M4PAT-01



ZCYS51R5-M6PT-01



ZCYS51R5-M8PT-01

