



**THE DATASHEET OF  
ZCYS51R5-2PAT-01**



# 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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# Common Mode Filters

Conformity to RoHS Directive

## For High-speed Differential Signal Line / General Signal Line

### ZCYS Series ZCYS51R5

#### FEATURES

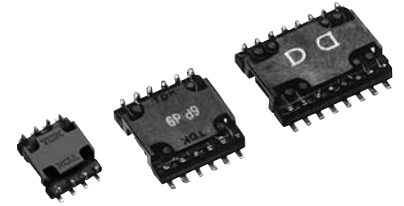
- The ZCYS series common mode filters provide highly effective noise rejection characteristics without distorting the transmission signal. Especially, most available for USB interface circuit.
- Well suited as a countermeasure against high-frequency radiation noise in small signal interface lines, this 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.

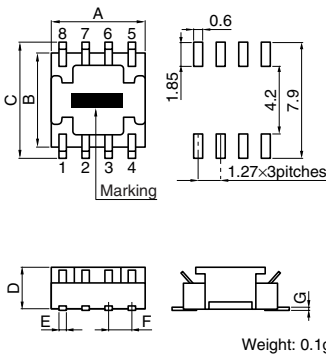
#### PACKAGING STYLE AND QUANTITIES

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

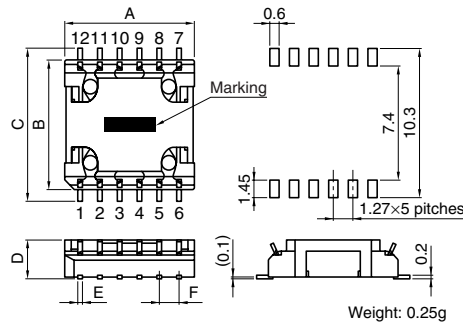


#### SHAPES AND DIMENSIONS/RECOMMENDED PC BOARD PATTERNS

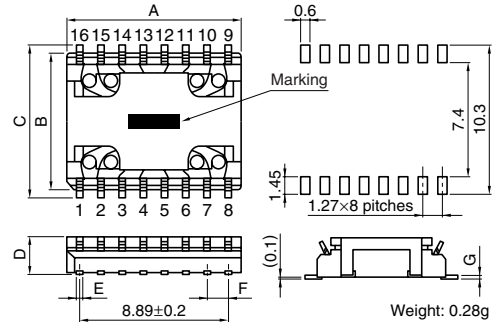
##### ZCYS51R5-M4PAT-01



##### ZCYS51R5-M6PT-01



##### ZCYS51R5-M8PT-01



Dimensions in mm

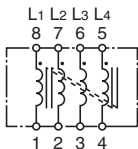
Part No.	A max.	B	C±0.5	D max.	E	F±0.15	G
ZCYS51R5-M4PAT*1-01*2	5.7	6.0	7	2.5	0.4	1.27	0.2
ZCYS51R5-M6PT-01	8.5	8.5	9.4	2.5	0.4	1.27	0.2
ZCYS51R5-M8PT-01	11	8.5	9.4	2.5	0.4	1.27	0.2

\*1 T means the taping product.

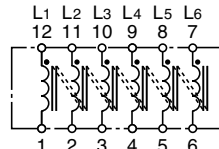
\*2 The "-01" designation at the end of the product code indicates Lead-free compatible product.

#### CIRCUIT DIAGRAMS

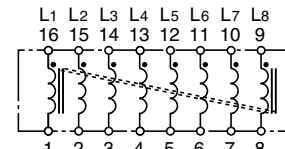
##### ZCYS51R5-M4PAT-01



##### ZCYS51R5-M6PT-01



##### ZCYS51R5-M8PT-01



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## ELECTRICAL CHARACTERISTICS

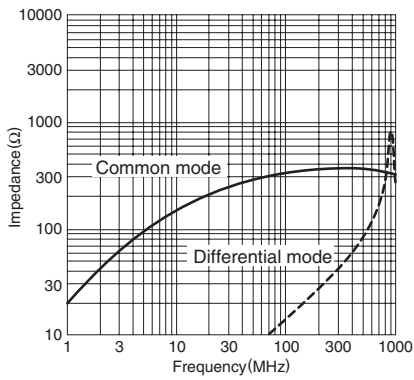
Part No.	ZCYS51R5-M4PAT-01	ZCYS51R5-M6PT-01	ZCYS51R5-M8PT-01
Rated voltage E <sub>dc</sub> (V)	50	50	50
Rated current (A)	0.5	0.5	0.5
Test voltage E <sub>dc</sub> (V) [Between terminals for 5s]	125	125	125
Insulation resistance (M $\Omega$ ) [Between terminals at DC.50V for 1min]	100min.	100min.	100min.
DC resistance ( $\Omega$ ) [each line]	0.2max.	0.25max.	0.3max.
Operating temperature range(°C)	-25 to +85	-25 to +85	-25 to +85
Impedance ( $\Omega$ ) [+5 to +35°C]	200min. [50 to 500MHz]	200min. [50 to 300MHz]	100min. [100 to 300MHz]

## TYPICAL ELECTRICAL CHARACTERISTICS

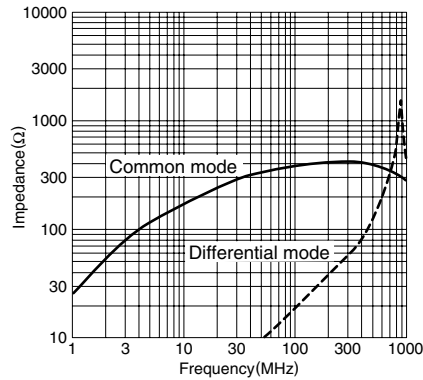
### IMPEDANCE vs. FREQUENCY CHARACTERISTICS

(for 1 element)

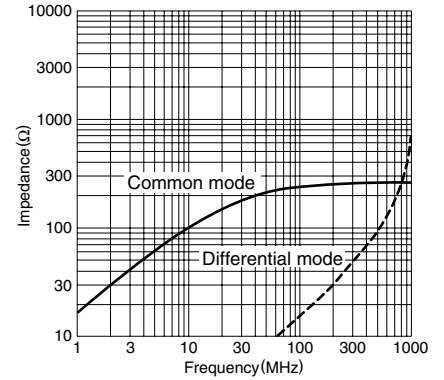
ZCYS51R5-M4PAT-01



ZCYS51R5-M6PT-01





ZCYS51R5-M8PT-01



## Looking for pricing, stock, or lifecycle information?

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-  [TDK Corporation Information](#)

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