# **EMC** Components

**ZJY Series** 

## Common-Mode Choke Coils for Signal Line and DC Power Line DIP

## **FEATURES**

- · A common-mode filter for distortion-free removal of noise from transmitted signals. Best common-mode filter for transmission of high quality signals.
- · Best filter for countering the common-mode noise resulting from data signal processing by PCs, phone equipment, etc.
- · Highly appropriate for IC board mounting due to DIP type structure.
- Due to a maximum current tolerance of 3A, can also be used to counter power line noise.

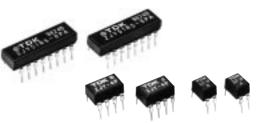
## SHAPES AND DIMENSIONS TRANSFER MOLD ZJY51R5-2P, -2PB, -2PL

ZJY5103-2PL

ZJY51R5-4P,-M4PA

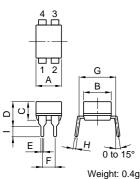


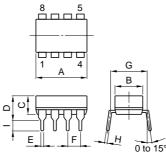
Personal computers, telephones, LANs, ISDNs, digital PBXs, electronic games, CTVs, CD-ROM drives, 8mm video equipment, and other electronic devices.



### PLASTIC CASE ZJY51R5-8PA

16





Weight: 0.8g

, iooooo 8 G A В 0 to 15

Weight: 1.6g

								Dir	nensions in mm
Part No.	A max.	B max.	C max.	D max.	Е	F±0.25	G	Н	I
ZJY51R5-2P, -2PB, -2PL, 5103-2PL	5.5	6.86	4.57	5.84	0.5	2.54	7.62	0.25	2.54
ZJY51R5-4P, -M4PA	10.5	6.86	4.57	5.84	0.5	2.54	7.62	0.25	2.54
ZJY51R5-8PA	23.5	7	4.6	6.3	0.5	2.54	7.62	0.25	2.54

CIRCUIT DIAGRAMS ZJY51R5-2P(T), -2PB(T), -2PL(T) ZJY5103-2PL(T)	ZJY51R5-4P	ZJY51R5-M4PA	ZJY51R5-8PA
	L1 L2 L3 L4 8 7 6 5 1 2 3 4		L1 L2 L3 L4 L5 L6 L7 L8 16 15 14 13 12 11 10 9

#### **ELECTRICAL CHARACTERISTICS**

Part No.	ZJY51R5-2P, -2PB <sup>*1</sup> , -2PL <sup>*2</sup> , -4P	ZJY5103-2PL	ZJY51R5-M4PA	ZJY51R5-8PA
Rated voltage Edc(V)	50	50	50	50
Rated current (A)	2	3	0.5	0.5
Test voltage Edc(V) [Between terminals for 5s]	125	125	125	125
Insulation resistance (MΩ) [Between terminals at DC.50V for 1min]	100min.	100min.	100min.	100min.
DC resistance (Ω) [Each line]	0.06max.	0.03max.	0.2max.	0.06max.
Operating temperature range (°C)	-25 to +85	-25 to +85	-25 to +85	-25 to +85
Impedance (Ω) [+5 to +35°C]	200min. [20 to 300MHz]	100min. [100 to 300MHz]	200min. [20 to 300MHz]	200min. [20 to 300MHz]

\*1 This type has improved low-range characteristics.

\*2 This type is wrapped separately (for communication lines).

▲ Specifications which provide more details for the proper and safe use of the described product are available upon request. All specifications are subject to change without notice.

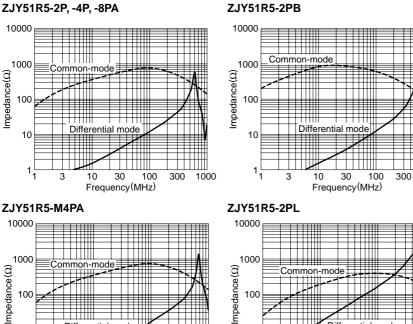


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## **TYPICAL ELECTRICAL CHARACTERISTICS IMPEDANCE CHARACTERISTICS (for 1 element)**



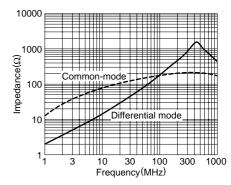
100

10

3

10

## ZJY5103-2PL



#### PACKAGING STYLE AND QUANTITIES (Tube)

(Tube)	
ZJY51R5-2P	80 pieces
ZJY51R5-2PB	80 pieces
ZJY51R5-2PL	80 pieces
ZJY5103-2PL	80 pieces
ZJY51R5-4P	40 pieces
ZJY51R5-M4PA	40 pieces
ZJY51R5-8PA	20 pieces

## **TYPICAL APPLICATION**

3

fferential mode

10

100

30

Frequency(MHz)

100

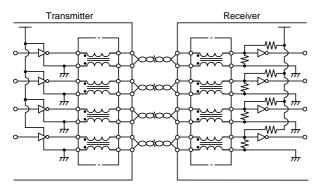
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1

An application example showing how radiation noise is prevented when transmitter and receiver are connected via twisted pair cabling.

300

1000



## **MEASURING CIRCUIT**

300 1000

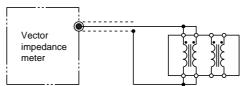
Differential mode

100

30

Frequency(MHz)

1000



Vector impedance meter(YHP 4191A equivalent) Measuring at each common-mode choke coil

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