

## Common Mode Filters(DIP)

For general signal line/Power line

### ZJY series

**Type:** ZJY51R5 (2, 4 and 8 lines)

**Issue date:** December 2010

- 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.

# Common Mode Filters(DIP) For General Signal Line / Power Line

Conformity to RoHS Directive

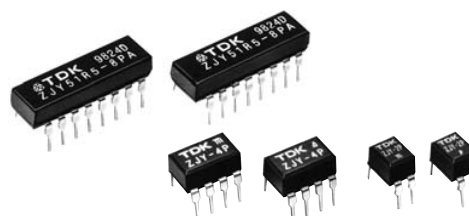
## ZJY Series

### 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 2A, can also be used to counter power line noise.

### APPLICATIONS

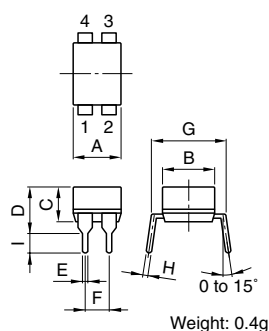
Personal computers, telephones, LANs, ISDNs, digital PBXs, electronic games, CTVs, CD-ROM drives, 8mm video equipment, and other electronic devices.



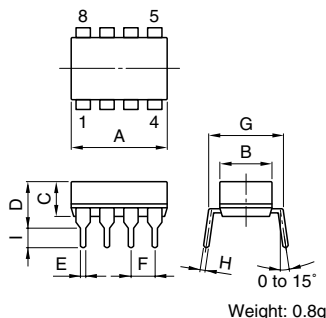
### SHAPES AND DIMENSIONS

#### TRANSFER MOLD

##### ZJY51R5-2P-01, -2PB-01, -2PL-01

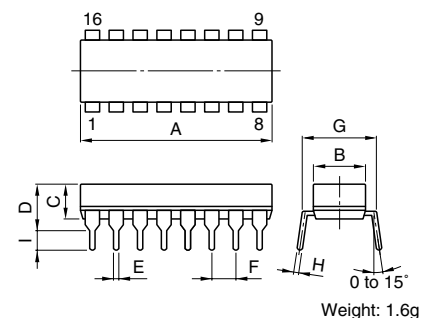


##### ZJY51R5-4P-01, -M4PA-01



#### PLASTIC CASE

##### ZJY51R5-8PA-01



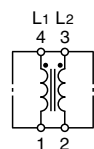
Dimensions in mm

Part No.	A max.	B max.	C max.	D max.	E	F±0.25	G	H	I
ZJY51R5-2P-01, -2PB-01, -2PL-01*	5.5	6.86	4.57	5.84	0.5	2.54	7.62	0.25	2.54
ZJY51R5-4P-01, -M4PA-01	10.5	6.86	4.57	5.84	0.5	2.54	7.62	0.25	2.54
ZJY51R5-8PA-01	23.5	7	4.6	6.3	0.5	2.54	7.62	0.25	2.54

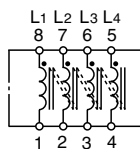
\* The "-01" designation at the end of the product code indicates Lead-free compatible product.

### CIRCUIT DIAGRAMS

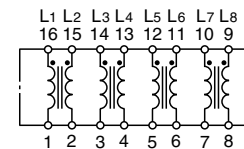
##### ZJY51R5-2P-01, -2PB-01, -2PL-01



##### ZJY51R5-4P-01, -M4PA-01



##### ZJY51R5-8PA-01



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## ELECTRICAL CHARACTERISTICS

Part No.	ZJY51R5-2P-01, -4P-01	ZJY51R5-2PB-01*1	ZJY51R5-2PL-01*2	ZJY51R5-M4PA-01	ZJY51R5-8PA-01
Rated voltage Edc(V)	50	50	50	50	50
Rated current (A)	2	2	2	0.5	0.5
Test voltage Edc(V) [Between terminals for 5s]	125	125	250	125	250
Insulation resistance (M $\Omega$ ) [Between terminals at DC.50V for 1min]	100 min.	100 min.	100 min.	100 min.	100 min.
DC resistance ( $\Omega$ ) [Each line]	0.12 max.	0.12 max.	0.10 max.	0.25 max.	0.07 max.
Operating temperature range ( $^{\circ}$ C)	-25 to +85	-25 to +85	-25 to +85	-25 to +85	-25 to +85
Impedance ( $\Omega$ ) [+5 to +35 $^{\circ}$ C]	200 min. [20 to 300MHz]	300 min. [6 to 20MHz]	100 min. [20 to 100MHz]	200 min. [20 to 300MHz]	200 min. [20 to 300MHz]

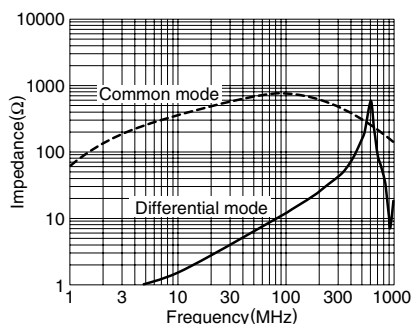
\*1 This type has improved low-range characteristics.

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

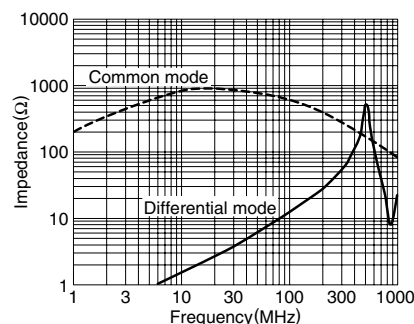
## TYPICAL ELECTRICAL CHARACTERISTICS

### IMPEDANCE CHARACTERISTICS (for 1 element)

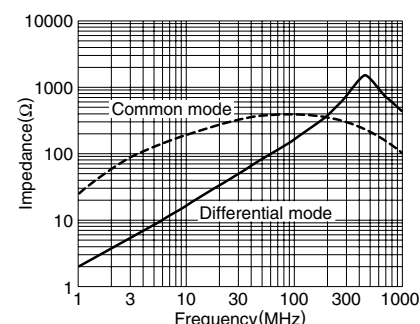
#### ZJY51R5-2P-01, -4P-01, -8PA-01



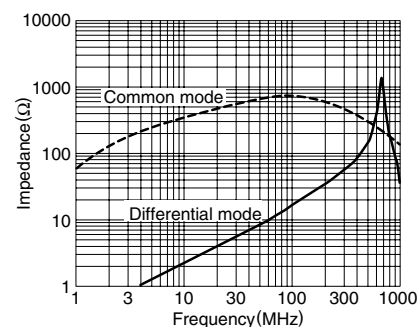
#### ZJY51R5-2PB-01



#### ZJY51R5-2PL-01

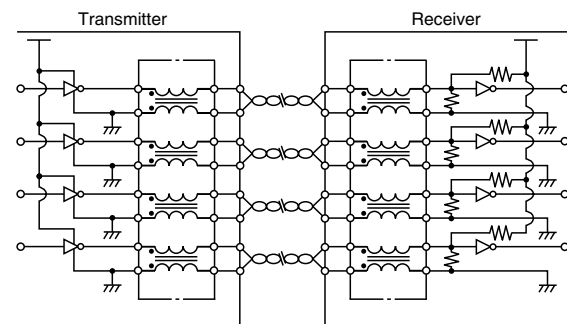


#### ZJY51R5-M4PA-01

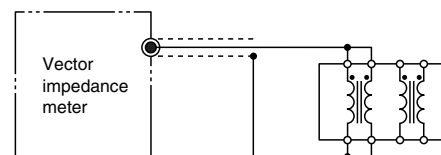


## TYPICAL APPLICATION

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



## MEASURING CIRCUIT



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

## PACKAGING STYLE AND QUANTITIES

### (Tube)

ZJY51R5-2P-01	80 pieces
ZJY51R5-2PB-01	80 pieces
ZJY51R5-2PL-01	80 pieces
ZJY51R5-4P-01	40 pieces
ZJY51R5-M4PA-01	40 pieces
ZJY51R5-8PA-01	20 pieces