

# Clamp Filters For Cable

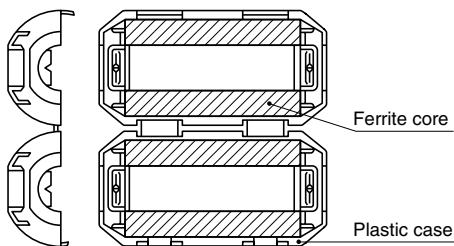
Conformity to RoHS Directive

## ZCAT Series

### FEATURES

- Unique plastic case ensures simple, convenient installation and includes a self-holding mechanism to prevent slippage on cables.
- Ferrite core provides excellent absorption of high-frequency EMC.
- Highly effective as countermeasure against common mode EMC without adverse effect on signal quality.
- Large core size prevents saturation during large signal surges.

### INTERNAL CONSTRUCTION



### APPLICATIONS

Personal computers, word processors, monitors, hard disk drives, digital telephones, audio devices, electronic musical instruments, video games, copiers and facsimiles.

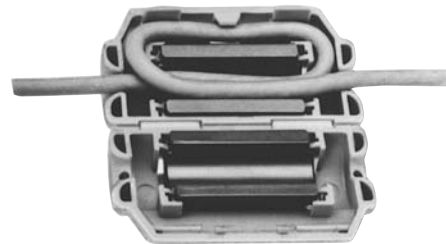
### PRODUCT IDENTIFICATION

| ZCAT | 24  | 36  | - | 13  | 30  | A   | - | BK  |
|------|-----|-----|---|-----|-----|-----|---|-----|
| (1)  | (2) | (3) |   | (4) | (5) | (6) |   | (7) |

- (1) Series name  
 (2) Outer dimensions(mm)  
 (3) Length(mm)  
 (4) Inner dimensions(mm)  
 (5) Material code  
 (6) Fixed type code  
   A: Cable fixed  
     Hold the cable to secure it with the main body  
   AP: Cable fixed  
     (with lock mechanism)  
   B: Clamp fixed  
   C: Cable coil securing type  
     (Coil the cable one time within the case to fix it/with lock mechanism.)  
   D: Flat cable type  
   DT: Flat cable type (Hold with adhesive pad.)  
   Non code: Band fixed  
     (Secure the cable and main body with the nylon belt.)  
 (7) Outer color code  
   BK: Black  
   Non code: Gray



### ZCAT-C TYPE



### PACKAGING STYLE AND QUANTITIES

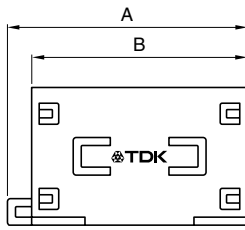
| Part No.   | Quantity        |
|------------|-----------------|
| ZCAT3035   | 200 pieces/box  |
| ZCAT2017-B | 350 pieces/box  |
| ZCAT2235   | 400 pieces/box  |
| ZCAT2436   | 400 pieces/box  |
| ZCAT2032   | 420 pieces/box  |
| ZCAT2035   | 480 pieces/box  |
| ZCAT2132   | 480 pieces/box  |
| ZCAT2749   | 400 pieces/box  |
| ZCAT1730   | 840 pieces/box  |
| ZCAT2017   | 640 pieces/box  |
| ZCAT1325   | 1344 pieces/box |
| ZCAT1518   | 896 pieces/box  |
| ZCAT1525   | 900 pieces/box  |
| ZCAT3618-D | 480 pieces/box  |
| ZCAT4625-D | 240 pieces/box  |
| ZCAT6819-D | 160 pieces/box  |

• 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.

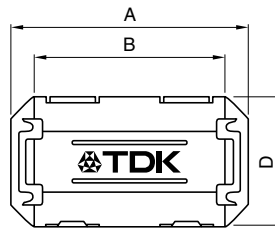
• All specifications are subject to change without notice.

## SHAPES AND DIMENSIONS

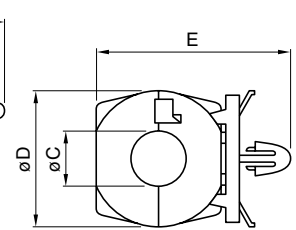
### ZCAT TYPE



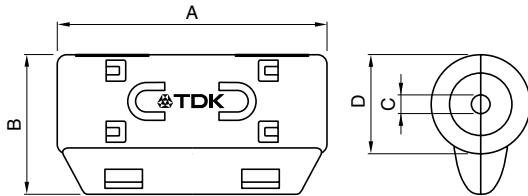
### ZCAT-A, ZCAT-AP TYPE



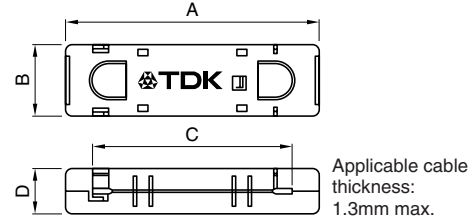
### ZCAT-B TYPE



### ZCAT-C TYPE



### ZCAT-D TYPE



Dimensions in mm

| Part No.                           | A      | B      | øC    | øD     | E      | Applicable cable outer dia. | Weight(g) | Impedance<br>freq. characteristics<br>Fig. |
|------------------------------------|--------|--------|-------|--------|--------|-----------------------------|-----------|--------------------------------------------|
| ZCAT1518-0730(BK)* <sup>1</sup>    | 22±1   | 18±1   | 7±1   | 15±1   | —      | 7max.                       | 6         | 1                                          |
| ZCAT2017-0930(-BK)* <sup>1</sup>   | 21±1   | 17±1   | 9±1   | 20±1   | —      | 9max.                       | 11        | 2                                          |
| ZCAT2032-0930(-BK)* <sup>1</sup>   | 36±1   | 32±1   | 9±1   | 19.5±1 | —      | 9max.                       | 22        | 3                                          |
| ZCAT2132-1130(-BK)* <sup>1</sup>   | 36±1   | 32±1   | 11±1  | 20.5±1 | —      | 11max.                      | 22        | 4                                          |
| ZCAT3035-1330(-BK)* <sup>1</sup>   | 39±1   | 34±1   | 13±1  | 30±1   | —      | 13max.                      | 63        | 5                                          |
| ZCAT1525-0430AP(-BK)               | 25±1   | 20±1   | 4±1   | 15±1   | 11.5±1 | 2.5 to 4(USB)               | 7         | 4                                          |
| ZCAT1325-0530A(-BK)                | 25±1   | 20±1   | 5±1   | 12.8±1 | 11.2±1 | 3 to 5(USB)                 | 7         | 4                                          |
| ZCAT1730-0730A(-BK)                | 30±1   | 23±1   | 7±1   | 16.5±1 | 15±1   | 4 to 7(USB/IEEE1394)        | 12        | 6                                          |
| ZCAT2035-0930A(-BK)                | 35±1   | 28±1   | 9±1   | 19.5±1 | 17.4±1 | 6 to 9                      | 22        | 3                                          |
| ZCAT2235-1030A(-BK)                | 35±1   | 28±1   | 10±1  | 21.5±1 | 20±1   | 8 to 10                     | 27        | 7                                          |
| ZCAT2436-1330A(-BK)                | 36±1   | 29±1   | 13±1  | 23.5±1 | 22±1   | 10 to 13                    | 29        | 8                                          |
| ZCAT2017-0930B(-BK)                | 21±1   | 17±1   | 9±1   | 20±1   | 28.5±1 | 9max.                       | 12        | 2                                          |
| ZCAT2749-0430C(-BK)                | 49±1   | 27±1   | 4.5±1 | 19.5±1 | —      | 4.5max.                     | 26        | 9                                          |
| ZCAT3618-2630D(-BK)                | 33.5±1 | 17.5±1 | 26±1  | 11.5±1 | —      | For 20 wires flat cable     | 15        | 10                                         |
| ZCAT3618-2630DT(-BK)* <sup>2</sup> | 33.5±1 | 17.5±1 | 26±1  | 12.5±1 | —      | For 20 wires flat cable     | 15        | 10                                         |
| ZCAT4625-3430D(-BK)                | 45.5±1 | 24.5±1 | 34±1  | 12±1   | —      | For 26 wires flat cable     | 32        | 11                                         |
| ZCAT4625-3430DT(-BK)* <sup>2</sup> | 45.5±1 | 24.5±1 | 34±1  | 13±1   | —      | For 26 wires flat cable     | 32        | 11                                         |
| ZCAT6819-5230D(-BK)                | 67.5±1 | 18.5±1 | 52±1  | 16±1   | —      | For 40 wires flat cable     | 58        | 11                                         |
| ZCAT6819-5230DT(-BK)* <sup>2</sup> | 67.5±1 | 18.5±1 | 52±1  | 17±1   | —      | For 40 wires flat cable     | 58        | 11                                         |

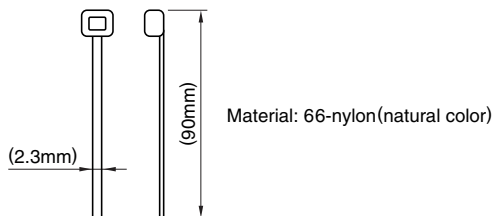
\*<sup>1</sup> These products are delivered with fixed band.

\*<sup>2</sup> ZCAT-DT type: Adapted for flat cables and hold with adhesive pad.

• ZCAT-B type: Clamp fixed type installation hole diameter ø4.8 to 4.9mm, thickness of board 0.5 to 2mm.

• ZCAT-AP, ZCAT-C type: Once closed, the case will not be easily opened manually.

## STRUCTURE OF THE MOUNTING BAND



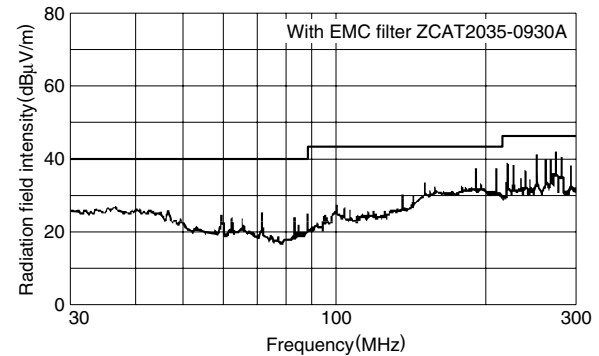
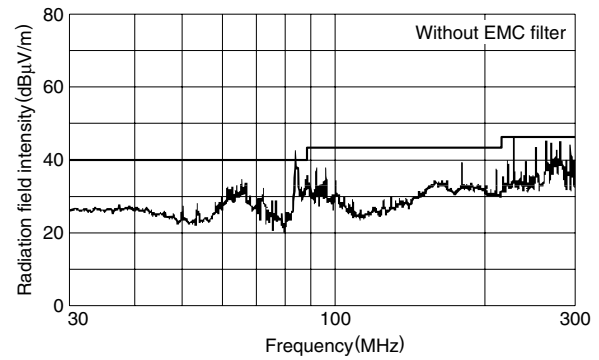
## ELECTRICAL CHARACTERISTICS

| Part No.               | Impedance ( $\Omega$ ) min. |                 |                |
|------------------------|-----------------------------|-----------------|----------------|
|                        | [10 to 100MHz]              | [100 to 500MHz] | [50 to 500MHz] |
| ZCAT1518-0730(-BK)     | 25                          | 50              | —              |
| ZCAT2017-0930(-BK)     | 20                          | 50              | —              |
| ZCAT2032-0930(-BK)     | 50                          | 100             | —              |
| ZCAT2132-1130(-BK)     | 40                          | 80              | —              |
| ZCAT3035-1330(-BK)     | 80                          | 150             | —              |
| ZCAT1525-0430AP(-BK)   | 50                          | 100             | —              |
| ZCAT1325-0530A(-BK)    | 50                          | 100             | —              |
| ZCAT1730-0730A(-BK)    | 40                          | 80              | —              |
| ZCAT2035-0930A(-BK)    | 50                          | 100             | —              |
| ZCAT2235-1030A(-BK)    | 50                          | 100             | —              |
| ZCAT2436-1330A(-BK)    | 30                          | 80              | —              |
| ZCAT2017-0930B(-BK)    | 20                          | 50              | —              |
| ZCAT2749-0430C(-BK)    | 50                          | 100             | —              |
| ZCAT3618-2603D(T)(-BK) | —                           | —               | 30             |
| ZCAT4625-3430D(T)(-BK) | —                           | —               | 35             |
| ZCAT6819-5230D(T)(-BK) | —                           | —               | 35             |

- Test conditions: R-X meter at unloaded condition,  $\phi 1$ mm solder plated copper wire passes through.

## TYPICAL EMC SUPPRESSION EFFECTS

### RADIATION LEVEL vs. FREQUENCY CHARACTERISTICS



## TYPICAL ELECTRICAL CHARACTERISTICS

### IMPEDANCE vs. FREQUENCY CHARACTERISTICS

ZCAT1518-0730

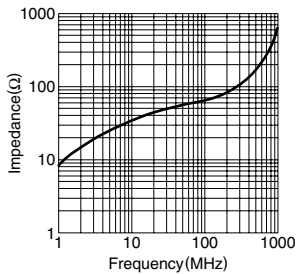


Fig.1

ZCAT2017-0930

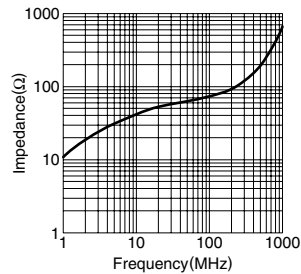


Fig.2

ZCAT2032-0930  
ZCAT2035-0930A

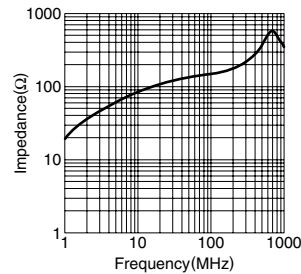


Fig.3

ZCAT1525-0430AP  
ZCAT2132-1130  
ZCAT1325-0530A

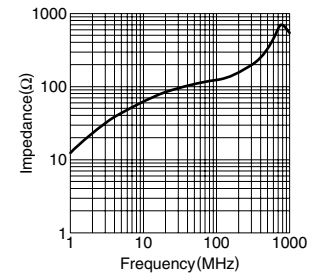


Fig.4

ZCAT3035-1330

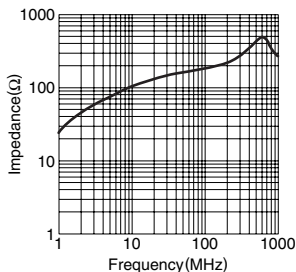


Fig.5

ZCAT1730-0730A

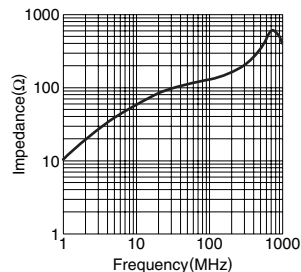


Fig.6

ZCAT2235-1030A

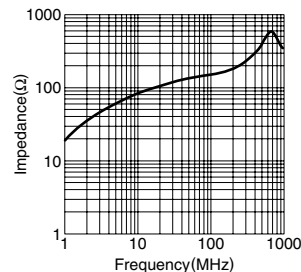


Fig.7

ZCAT2436-1330A

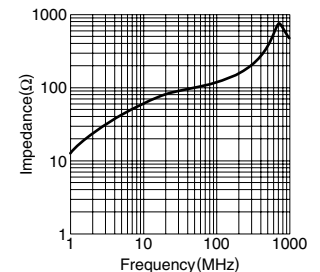


Fig.8

# TYPICAL ELECTRICAL CHARACTERISTICS

## IMPEDANCE vs. FREQUENCY CHARACTERISTICS

ZCAT2749-0430C

ZCAT3618-2630D

ZCAT4625-3430D

ZCAT6819-5230D

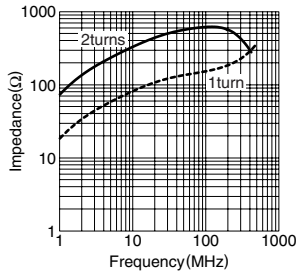


Fig.9

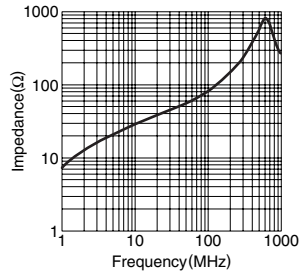


Fig.10

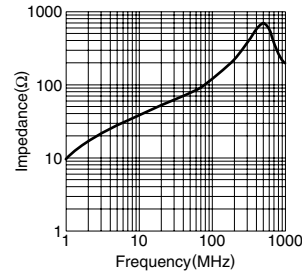


Fig.11