

Clamp Filters (Ferrite Core with Case)

For cable

ZCAT series

Type: ZCAT
 ZCAT-A
 ZCAT-B
 ZCAT-D/-DT

Issue date: April 2013

- 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.

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.

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
 B: Clamp fixed
 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

TEMPERATURE RANGES

Operating temperature range	–40 to +85°C
Temperature range for engagement work	0 to +50°C



PACKAGING STYLE AND QUANTITIES

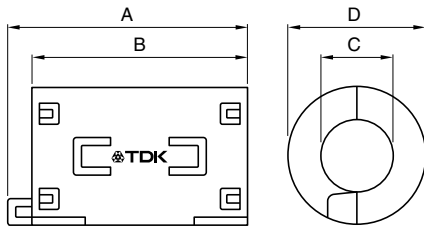
Type	Quantity
ZCAT3035	200 pieces/box
ZCAT2017-B	350 pieces/box
ZCAT2235	400 pieces/box
ZCAT2436	400 pieces/box
ZCAT2032	420 pieces/box
ZCAT2035	480 pieces/box
ZCAT2132	480 pieces/box
ZCAT1730	840 pieces/box
ZCAT2017	640 pieces/box
ZCAT1325	1344 pieces/box
ZCAT1518	896 pieces/box
ZCAT3618-D	480 pieces/box
ZCAT4625-D	240 pieces/box
ZCAT6819-D	160 pieces/box
ZCAT10D	770 pieces/box
ZCAT13D	450 pieces/box
ZCAT20D	320 pieces/box

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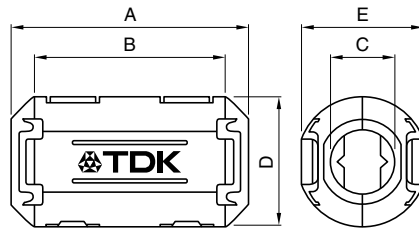
• All specifications are subject to change without notice.

SHAPES AND DIMENSIONS

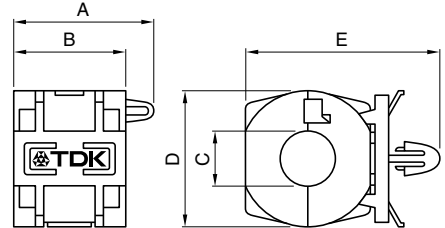
ZCAT



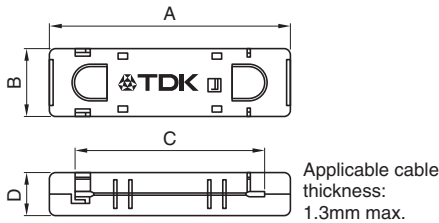
ZCAT-A



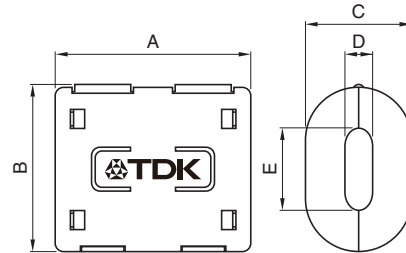
ZCAT-B



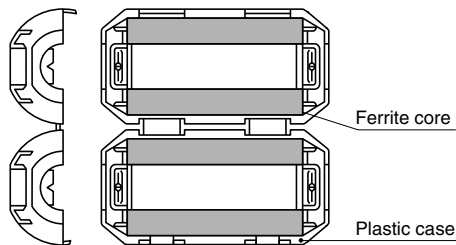
ZCAT-D, ZCAT-DT



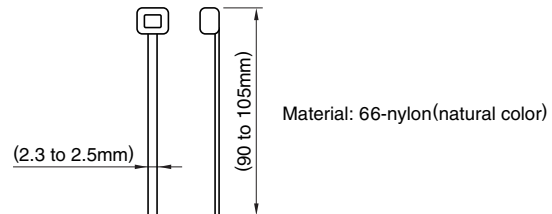
ZCAT10D, 13D, 20D



INTERNAL CONSTRUCTION



STRUCTURE OF THE MOUNTING BAND



Part No.						Applicable cable outer diameter	Weight (g)	Dimensions in mm
	A	B	C	D	E			Impedance freq. characteristics Fig.
ZCAT1518-0730(-BK)* ¹	22±1	18±1	7±1	15±1	—	7max.	6.1	1
ZCAT2017-0930(-BK)* ¹	21±1	17±1	9±1	20±1	—	9max.	11.0	2
ZCAT2032-0930(-BK)* ¹	36±1	32±1	9±1	19.5±1	—	9max.	22.7	3
ZCAT2132-1130(-BK)* ¹	36±1	32±1	11±1	20.5±1	—	11max.	21.6	4
ZCAT3035-1330(-BK)* ¹	39±1	34±1	13±1	30±1	—	13max.	64.8	5
ZCAT1325-0530A(-BK)	25±1	20±1	5±1	12.8±1	11.2±1	3 to 5(USB)	6.37	4
ZCAT1730-0730A(-BK)	30±1	23±1	7±1	16.5±1	15±1	4 to 7(USB/IEEE1394)	11.6	6
ZCAT2035-0930A(-BK)	35±1	28±1	9±1	19.5±1	17.4±1	6 to 9	21.2	3
ZCAT2235-1030A(-BK)	35±1	28±1	10±1	21.5±1	20±1	8 to 10	26.0	7
ZCAT2436-1330A(-BK)	36±1	29±1	13±1	23.5±1	22±1	10 to 13	29.0	8
ZCAT2017-0930B(-BK)	21±1	17±1	9±1	20±1	(29)	9max.	11.5	2
ZCAT3618-2630D(-BK)	33.5±1	17.5±1	26±1	11.5±1	—	For 20 wires flat cable	15.6	9
ZCAT3618-2630DT(-BK)* ²	33.5±1	17.5±1	26±1	12.5±1	—	For 20 wires flat cable	15.6	9
ZCAT4625-3430D(-BK)	45.5±1	24.5±1	34±1	12±1	—	For 26 wires flat cable	32.5	10
ZCAT4625-3430DT(-BK)* ²	45.5±1	24.5±1	34±1	13±1	—	For 26 wires flat cable	32.5	10
ZCAT6819-5230D(-BK)	67.5±1	18.5±1	52±1	16±1	—	For 40 wires flat cable	58.4	10
ZCAT6819-5230DT(-BK)* ²	67.5±1	18.5±1	52±1	17±1	—	For 40 wires flat cable	58.4	10
ZCAT 10D(-BK)	27±1	14.5±1	10±1	4±1	7±1	4max.	5.6	11
ZCAT 13D(-BK)	34±1	20±1	13±1	5±1	8.5±1	5max.	14.8	12
ZCAT 20D(-BK)	35±1	30±1	20±1	5±1	15±1	5max.	46.3	13

*¹ These products are delivered with fixed band.

*² ZCAT-DT type: Adapted for flat cables and hold with adhesive pad.

• ZCAT-B type: Clamp fixed type installation hole diameter ϕ 4.8 to 4.9mm, thickness of board 0.5 to 2mm.

ELECTRICAL CHARACTERISTICS

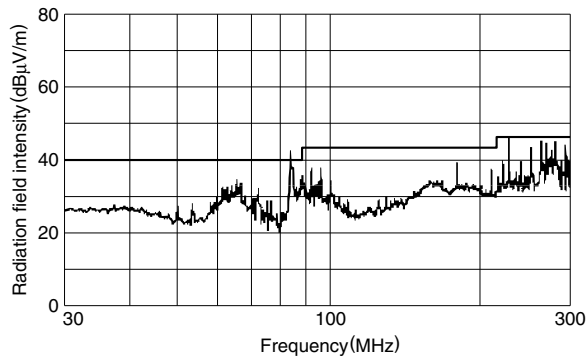
Part No.	Impedance (Ω) min.		
	[10 to 100MHz]	[100 to 500MHz]	[50 to 500MHz]
ZCAT1518-0730(-BK)	25	50	—
ZCAT2017-0930(-BK)	20	50	—
ZCAT2032-0930(-BK)	50	100	—
ZCAT2132-1130(-BK)	40	80	—
ZCAT3035-1330(-BK)	80	150	—
ZCAT1325-0530A(-BK)	50	100	—
ZCAT1730-0730A(-BK)	40	80	—
ZCAT2035-0930A(-BK)	50	100	—
ZCAT2235-1030A(-BK)	50	100	—
ZCAT2436-1330A(-BK)	30	80	—
ZCAT2017-0930B(-BK)	20	50	—
ZCAT3618-2630D(T)(-BK)	—	—	30
ZCAT4625-3430D(T)(-BK)	—	—	35
ZCAT6819-5230D(T)(-BK)	—	—	35
ZCAT 10D(-BK)	25	70	—
ZCAT 13D(-BK)	40	100	—
ZCAT 20D(-BK)	60	150	—

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

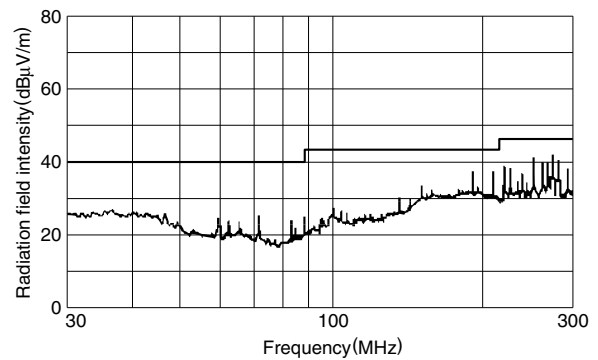
TYPICAL EMC SUPPRESSION EFFECTS

RADIATION LEVEL vs. FREQUENCY CHARACTERISTICS

Without EMC filter



With EMC filter ZCAT2035-0930A



TYPICAL ELECTRICAL CHARACTERISTICS

IMPEDANCE vs. FREQUENCY CHARACTERISTICS

ZCAT1518-0730

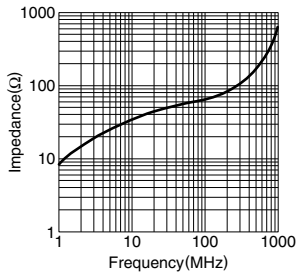


Fig.1

**ZCAT2017-0930
ZCAT2017-0930B**

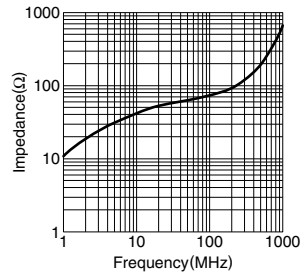


Fig.2

**ZCAT2032-0930
ZCAT2035-0930A**

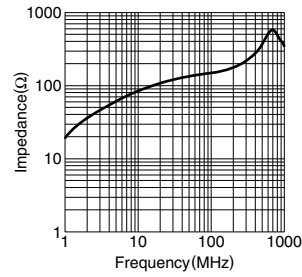


Fig.3

**ZCAT2132-1130
ZCAT1325-0530A**

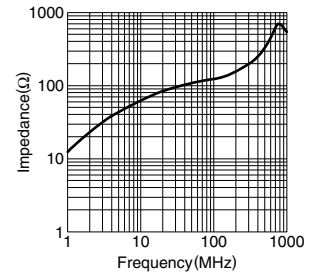


Fig.4

ZCAT3035-1330

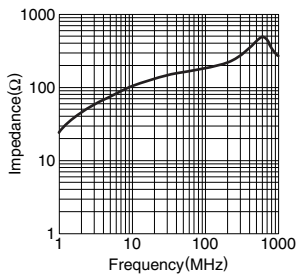


Fig.5

ZCAT1730-0730A

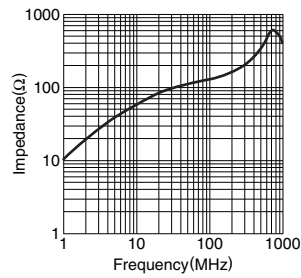


Fig.6

ZCAT2235-1030A

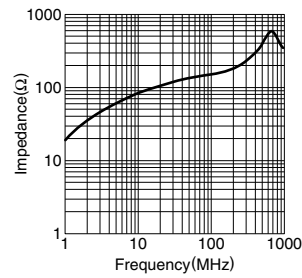


Fig.7

ZCAT2436-1330A

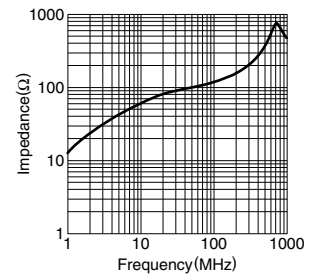


Fig.8

ZCAT3618-2630D(T)

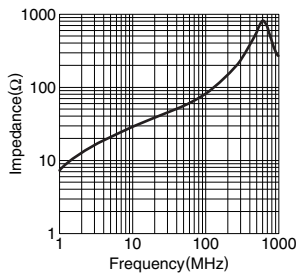


Fig.9

**ZCAT4625-3430D(T)
ZCAT6819-5230D(T)**

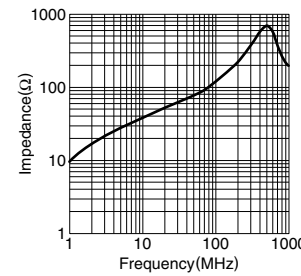


Fig.10

ZCAT10D

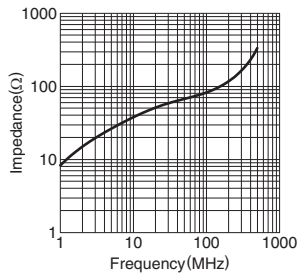


Fig.11

ZCAT13D

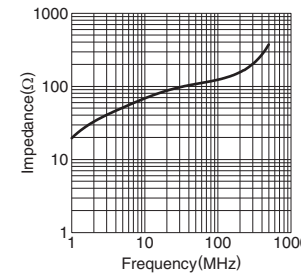


Fig.12

ZCAT20D

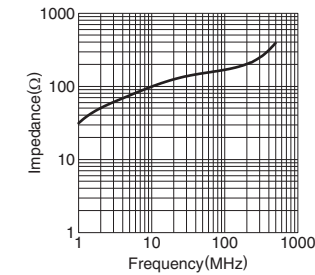


Fig.13