

3-terminal filters

For power line

ACH series



ACH4518 type



FEATURES

- T-type EMC filter that can be used for high-current circuits.
- Achieve excellent attenuation characteristics by using it for circuits with stable grounds.
- Does not require mounting space due to vertical mounting design, making it perfect for high-density circuits.
- Guaranteed temperature range is -40 to $+125^{\circ}\text{C}$, so it can be used under severe environmental conditions.
- Use this product under reflow soldering conditions.

APPLICATION

- HE devices (TVs, VTRs, CD players, electronic musical instruments, PCs, etc.)
- OA equipment (Computers, terminals, facsimiles, etc.)
- FA equipment (Robots, NC machine tools, process controllers, etc.)
- AE equipment (Car navigation systems, ECUs, etc.)

PART NUMBER CONSTRUCTION

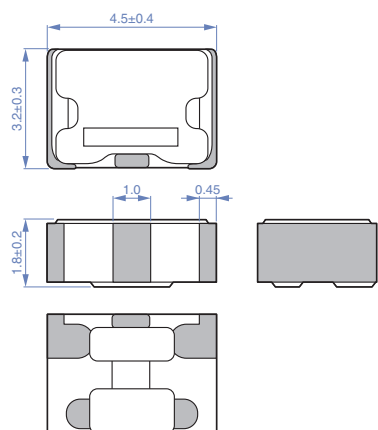
ACH	4518	-	223	-	T	D01
Series name	LxWxT dimensions (mm)		Capacitance (pF)		Packaging style	Internal code

CHARACTERISTICS SPECIFICATION TABLE

Insertion loss 25dB frequency range	Rated voltage	Rated current	DC resistance	Insulation resistance	Part No.
(MHz)	(V)max.	(A)max.	[Terminal No.1 to 3] (Ω)max.	[Terminal No.1 to 2/No.2 to 3] (M Ω)min.	
6 to 60	50	2.0	0.06	1000	ACH4518-333-TD01
9 to 65	50	2.0	0.06	1000	ACH4518-223-TD01
11 to 70	50	2.0	0.06	1000	ACH4518-153-TD01
15 to 75	50	2.0	0.06	1000	ACH4518-103-TD01
20 to 85	50	2.0	0.06	1000	ACH4518-682-TD01
25 to 90	50	2.0	0.06	1000	ACH4518-472-TD01
35 to 100	50	2.0	0.06	1000	ACH4518-332-TD01
40 to 110	50	2.0	0.06	1000	ACH4518-222-TD01
50 to 130	50	2.0	0.06	1000	ACH4518-152-TD01
65 to 150	50	2.0	0.06	1000	ACH4518-102-TD01
75 to 160	50	2.0	0.06	1000	ACH4518-681-TD01
95 to 180	50	2.0	0.06	1000	ACH4518-471-TD01
115 to 205	50	2.0	0.06	1000	ACH4518-331-TD01
150 to 250	50	2.0	0.06	1000	ACH4518-221-TD01
190 to 290	50	2.0	0.06	1000	ACH4518-151-TD01
235 to 335	50	2.0	0.06	1000	ACH4518-101-TD01
290 to 395	50	2.0	0.06	1000	ACH4518-680-TD01
360 to 460	50	2.0	0.06	1000	ACH4518-470-TD01
450 to 550	50	2.0	0.06	1000	ACH4518-330-TD01
530 to 650	50	2.0	0.06	1000	ACH4518-220-TD01

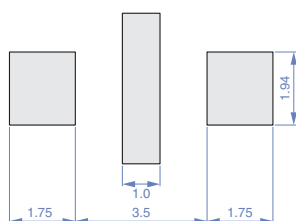
ACH4518 type

SHAPE & DIMENSIONS



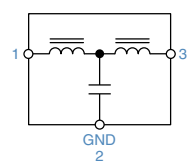
Dimensions in mm

RECOMMENDED LAND PATTERN



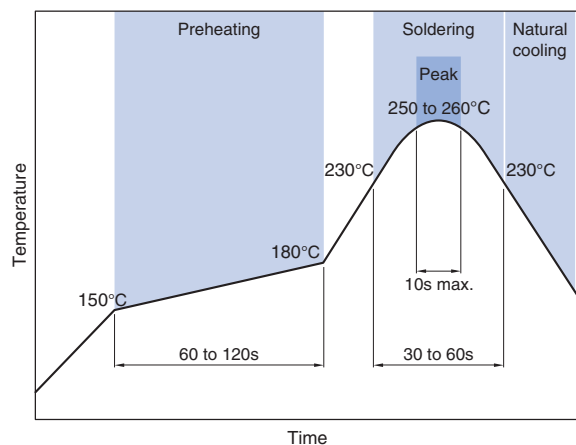
Dimensions in mm

CIRCUIT DIAGRAM



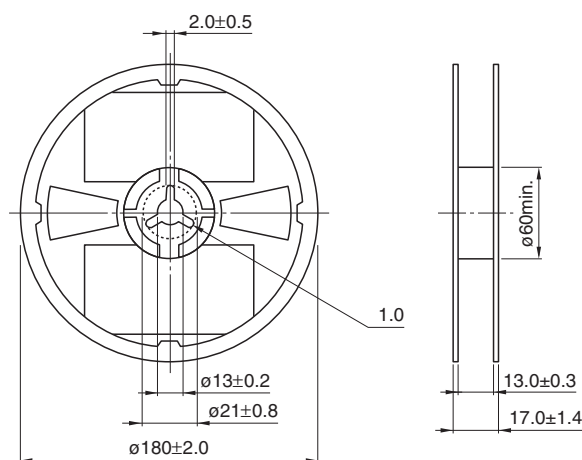
• No polarity

RECOMMENDED REFLOW PROFILE



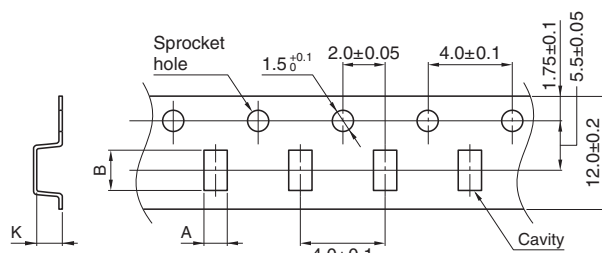
PACKAGING STYLE

REEL DIMENSIONS



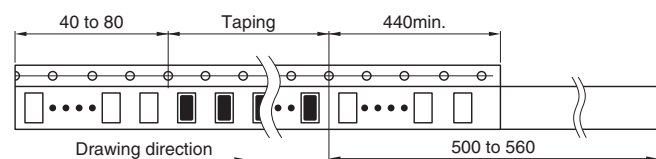
Dimensions in mm

TAPE DIMENSIONS



Dimensions in mm

Type	A	B	K
ACH4518	2.2±0.1	5.2±0.2	3.5max.



Dimensions in mm

PACKAGE QUANTITY

Package quantity	1,000 pcs/reel
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TEMPERATURE RANGE, INDIVIDUAL WEIGHT

Operating temperature range	Storage temperature range*	Individual weight
-40 to +125 °C	-40 to +125 °C	130 mg

* The storage temperature range is for after the assembly.

REMINDERS FOR USING THESE PRODUCTS

Before using these products, be sure to request the delivery specifications.

SAFETY REMINDERS

Please pay sufficient attention to the warnings for safe designing when using this products.

REMINDERS

- The storage period is less than 12 months. Be sure to follow the storage conditions (temperature: 5 to 40°C, humidity: 10 to 75% RH or less).
If the storage period elapses, the soldering of the terminal electrodes may deteriorate.
- Do not use or store in locations where there are conditions such as gas corrosion (salt, acid, alkali, etc.).
- Before soldering, be sure to preheat components.
The preheating temperature should be set so that the temperature difference between the solder temperature and chip temperature does not exceed 150°C.
- Soldering corrections after mounting should be within the range of the conditions determined in the specifications.
If overheated, a short circuit, performance deterioration, or lifespan shortening may occur.
- When embedding a printed circuit board where a chip is mounted to a set, be sure that residual stress is not given to the chip due to the overall distortion of the printed circuit board and partial distortion such as at screw tightening portions.
- Self heating (temperature increase) occurs when the power is turned ON, so the tolerance should be sufficient for the set thermal design.
- Carefully lay out the coil for the circuit board design of the non-magnetic shield type.
A malfunction may occur due to magnetic interference.
- Use a wrist band to discharge static electricity in your body through the grounding wire.
- Do not expose the products to magnets or magnetic fields.
- Do not use for a purpose outside of the contents regulated in the delivery specifications.
- The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.
The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.
If you intend to use the products in the applications listed below or if you have special requirements exceeding the range or conditions set forth in the each catalog, please contact us.

- (1) Aerospace/aviation equipment
- (2) Transportation equipment (cars, electric trains, ships, etc.)
- (3) Medical equipment
- (4) Power-generation control equipment
- (5) Atomic energy-related equipment
- (6) Seabed equipment
- (7) Transportation control equipment

- (8) Public information-processing equipment
- (9) Military equipment
- (10) Electric heating apparatus, burning equipment
- (11) Disaster prevention/crime prevention equipment
- (12) Safety equipment
- (13) Other applications that are not considered general-purpose applications

When designing your equipment even for general-purpose applications, you are kindly requested to take into consideration securing protection circuit/device or providing backup circuits in your equipment.