

3-terminal Filters

For signal line

ACF series

Type:	ACF3225	[1210 inch]*
	ACF4532	[1812 inch]
* Dimensions Code [EIA]		

Issue date: September 2011

- 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.

3-terminal Filters

For Signal Line

Conformity to RoHS Directive

ACF Series ACF321825, ACF451832

FEATURES

- The ACF series consists of products with superior attenuation characteristics, in which the T-type filter circuit is magnetically shielded with ferrite.
- The series offers even greater attenuation characteristics when used in a stable circuit on the ground.
- The ACF series is ideal for high-density circuit design, since the series is vertically mounted and does not require much mounting space.
- Available for reflow soldering.
- It is a product conforming to RoHS directive.

PRODUCT IDENTIFICATION

ACF	321825	-	223	-	T	D□□
(1)	(2)	(3)	(4)	(5)		

- (1) Series name
 (2) Dimensions
 (3) Type
 (4) Packaging style
 (5) TDK internal code

TEMPERATURE RANGES

Operating/Storage	-25 to +85°C
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PACKAGING STYLE AND QUANTITIES

Packaging style	Quantity
Taping	1000 pieces/reel

HANDLING AND PRECAUTIONS

- Before soldering, be sure to preheat components. The preheating temperature should be set so that the temperature difference between the solder temperature and product temperature does not exceed 150°C.
- After mounting components onto the printed circuit board, do not apply stress through board bending or mishandling.
- The inductance value may change due to magnetic saturation if the current exceeds the rated maximum.
- Do not expose the inductors to stray magnetic fields.
- Avoid static electricity discharge during handling.
- When hand soldering, apply the soldering iron to the printed circuit board only. Temperature of the iron tip should not exceed 350°C. Soldering time should not exceed 3 seconds.

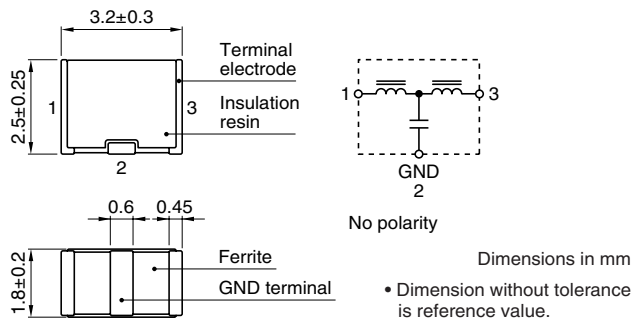
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• Please contact our Sales office when your application is considered the following:
 The device's failure or malfunction may directly endanger human life (e.g. application for automobile/aircraft/medical/nuclear power devices, etc.)

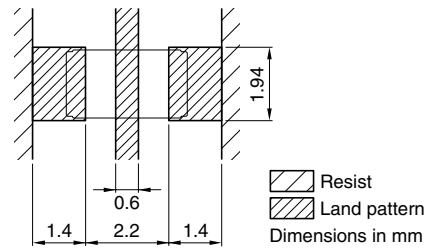
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ACF321825 TYPE

SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



RECOMMENDED PC BOARD PATTERN REFLOW SOLDERING

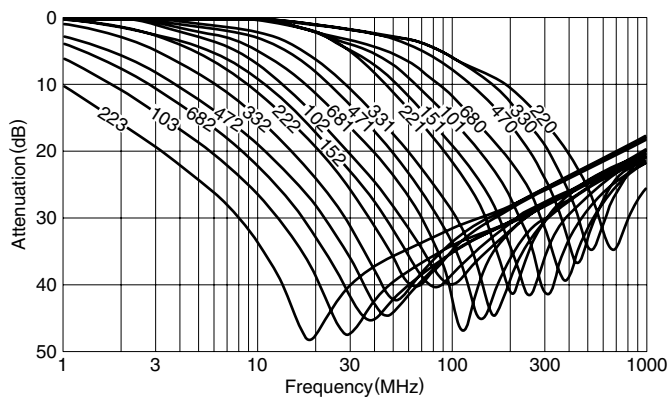


ELECTRICAL CHARACTERISTICS

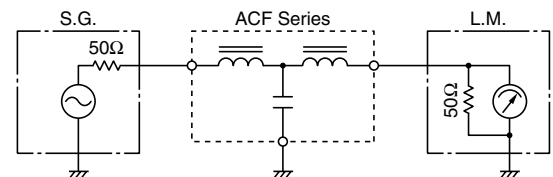
Part No.	25dB attenuation frequency range (MHz)	Rated voltage E _{dc} (V)max.	Rated current (mA)max.	DC resistance (Ω)max. [Terminal No.1 to 3]	Insulation resistance (MΩ)min. [Terminal No.1 to 2/No.2 to 3]
ACF321825-223	11 to 55	20	300	0.15	1000
ACF321825-103	17 to 60	20	300	0.15	1000
ACF321825-682	22 to 75	20	300	0.15	1000
ACF321825-472	30 to 85	20	300	0.15	1000
ACF321825-332	37 to 90	20	300	0.15	1000
ACF321825-222	45 to 105	20	300	0.15	1000
ACF321825-152	60 to 115	20	300	0.15	1000
ACF321825-102	80 to 140	20	300	0.15	1000
ACF321825-681	95 to 150	20	300	0.15	1000
ACF321825-471	120 to 180	20	300	0.15	1000
ACF321825-331	130 to 210	20	300	0.15	1000
ACF321825-221	170 to 250	20	300	0.15	1000
ACF321825-151	205 to 280	20	300	0.15	1000
ACF321825-101	265 to 340	20	300	0.15	1000
ACF321825-680	340 to 420	20	300	0.15	1000
ACF321825-470	420 to 500	20	300	0.15	1000
ACF321825-330	500 to 600	20	300	0.15	1000
ACF321825-220	600 to 700	20	300	0.15	1000

TYPICAL ELECTRICAL CHARACTERISTICS

ATTENUATION vs. FREQUENCY CHARACTERISTICS

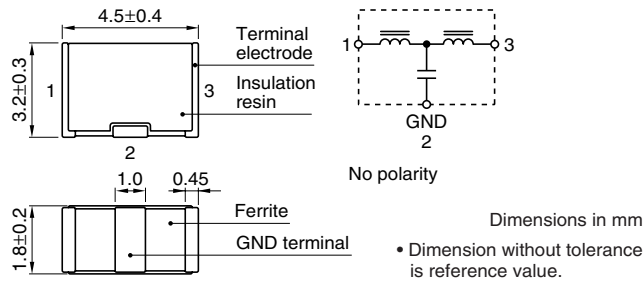


MEASURING CIRCUIT

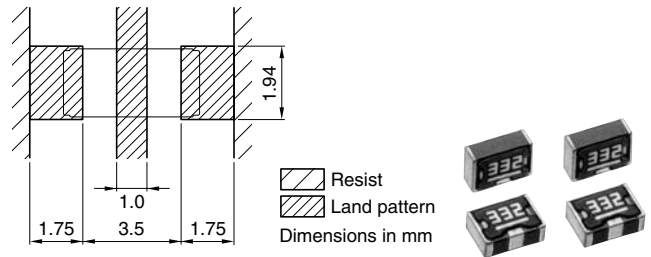


ACF451832 TYPE

SHAPES AND DIMENSIONS/CIRCUIT DIAGRAM



RECOMMENDED PC BOARD PATTERN REFLOW SOLDERING

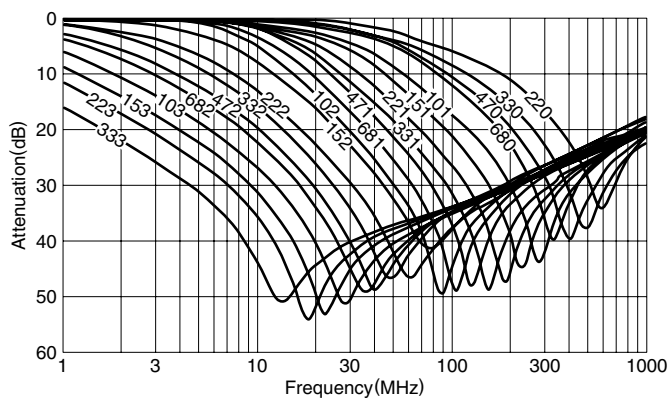


ELECTRICAL CHARACTERISTICS

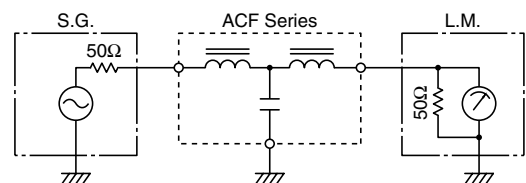
Part No.	25dB attenuation frequency range (MHz)	Rated voltage Edc (V)max.	Rated current (mA)max.	DC resistance (Ω)max. [Terminal No.1 to 3]	Insulation resistance (M Ω)min. [Terminal No.1 to 2/No.2 to 3]
ACF451832-333	7 to 60	50	300	0.15	1000
ACF451832-223	9 to 65	50	300	0.15	1000
ACF451832-153	11 to 70	50	300	0.15	1000
ACF451832-103	15 to 75	50	300	0.15	1000
ACF451832-682	20 to 85	50	300	0.15	1000
ACF451832-472	25 to 90	50	300	0.15	1000
ACF451832-332	35 to 100	50	300	0.15	1000
ACF451832-222	40 to 110	50	300	0.15	1000
ACF451832-152	50 to 130	50	300	0.15	1000
ACF451832-102	65 to 150	50	300	0.15	1000
ACF451832-681	75 to 160	50	300	0.15	1000
ACF451832-471	95 to 180	50	300	0.15	1000
ACF451832-331	115 to 205	50	300	0.15	1000
ACF451832-221	150 to 250	50	300	0.15	1000
ACF451832-151	190 to 290	50	300	0.15	1000
ACF451832-101	235 to 335	50	300	0.15	1000
ACF451832-680	295 to 395	50	300	0.15	1000
ACF451832-470	360 to 460	50	300	0.15	1000
ACF451832-330	450 to 550	50	300	0.15	1000
ACF451832-220	550 to 650	50	300	0.15	1000

TYPICAL ELECTRICAL CHARACTERISTICS

ATTENUATION vs. FREQUENCY CHARACTERISTICS



MEASURING CIRCUIT



Technical drawing of a circular mechanical part, showing front and side views with dimensions in mm.

Front View Dimensions:

- Overall Diameter: $\varnothing 178 \pm 2.0$
- Central Hole Diameter: $\varnothing 13 \pm 0.5$
- Flange Thickness: 1.0
- Spoke Width: 2.0 ± 0.5
- Inner Hole Diameter: $\varnothing 21 \pm 0.8$

Side View Dimensions:

- Overall Height: 17.0 ± 1.4
- Central Hole Diameter: $\varnothing 60 \pm 2.0$
- Flange Thickness: 13.0 ± 0.3

Dimensions in mm

Figure 1 is a schematic diagram of the experimental setup for the production of a composite material. It shows a cross-section of a material with a central core and two outer layers. The core is labeled "Taping" and has a width of "40 to 80". The outer layers are labeled "200min." and "300min.". The drawing direction is indicated by an arrow pointing to the right.